



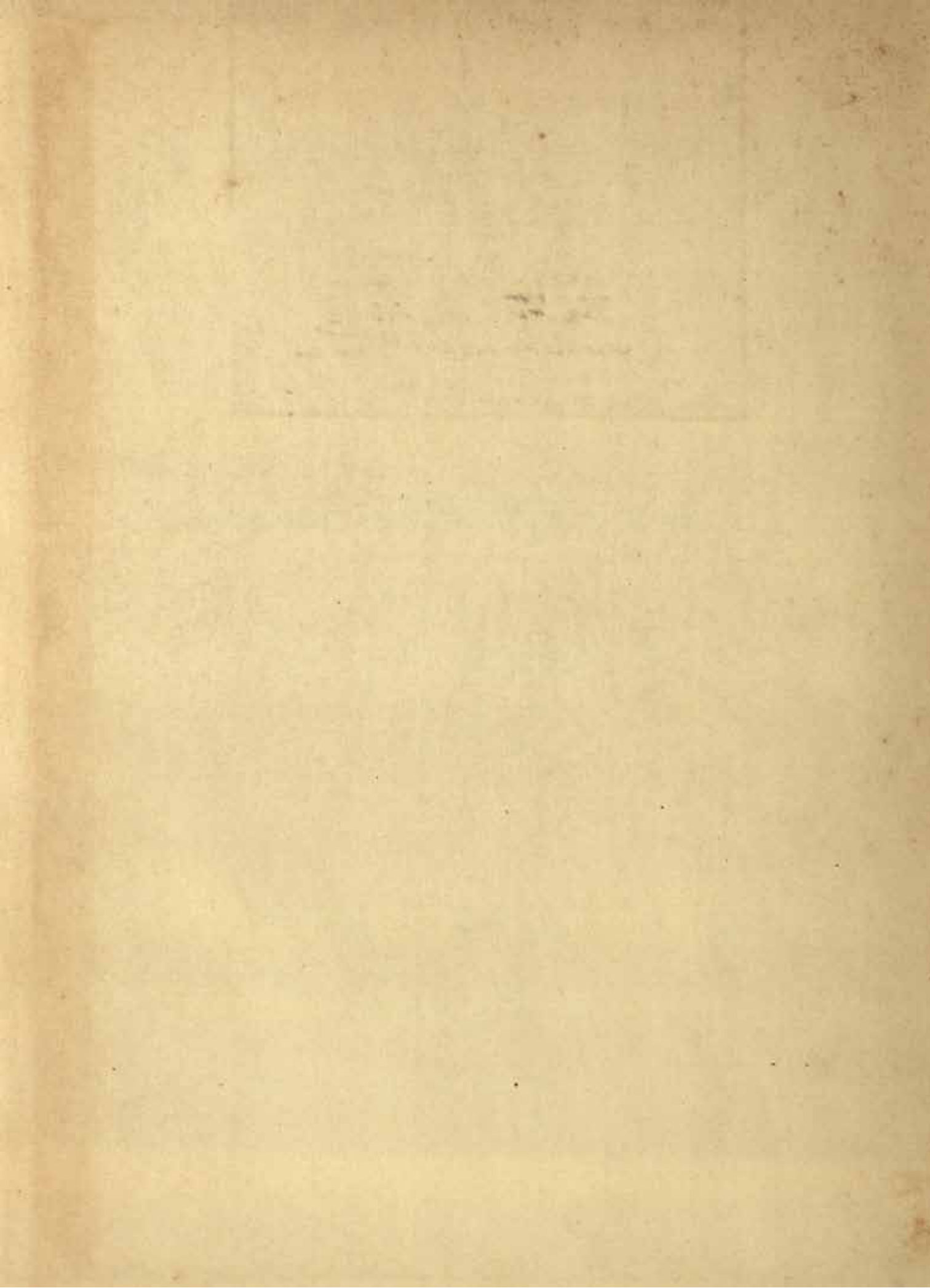
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BUDDHIST ARCHITECTURE IN JAPAN

PRINCETON MONOGRAPHS IN ART
AND ARCHAEOLOGY

XXII

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THE EVOLUTION OF BUDDHIST ARCHITECTURE IN JAPAN

ALEXANDER COBURN SOPER, III

1386

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To My Wife

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FOREWORD

The material for this book was accumulated during a stay of approximately two and a half years in Japan, between 1935 and 1938. Short distances and good communications made it possible for me in that period to see with my own eyes the great majority of the architectural materials from Japan proper which were necessary to my study. I had intended also to devote a fair proportion of my time in the Far East to China; but the outbreak of the Sino-Japanese war in 1937 made travel on the continent difficult, and in the end I was able to arrange only about a month within the territory in the North then occupied by Japanese forces. Most of that time was necessarily spent in Peking; I succeeded in visiting two important temple sites of the eleventh and twelfth centuries, Ta-t'ung-fu in Shansi and I-hsien in Manchukuo, and in addition acquired a wider experience of regional variations in Mukden and Korea. To my great disappointment I was unable to make any contact with the active Chinese members of the Society for Research in Chinese Architecture, who had been driven by the war from their headquarters in Peking.

The opportunity to make this study I owe to the generosity of two American organizations which in turn maintained me as a Fellow in the Far East; the American Council of Learned Societies, and the General Education Board of the Rockefeller Foundation. In Japan my way was smoothed by the official courtesies of the Department of Education and the Society for International Cultural Relations; in addition I received friendly advice and encouragement from several individuals, notably from Professors Amanuma and Hamada in Kyōto, from Messrs. Hattori and Ōoka in the state architectural offices in Tōkyō, and from the younger Professor Sekino in Tōkyō University. In Peking I benefited particularly from the kindness and wide experience of Professor Ecke of the Catholic University.

Finally I wish to record my gratitude for the help given me at various stages of my interest in the Far East by friends and associates in the United States. I have been long indebted to George Rowley of Princeton for the initial persuasion which turned me toward Chinese and Japanese studies. With specific reference to this book, I owe a general encouragement to Louis Ledoux of New York, and much helpful criticism to Baldwin Smith of Princeton.

Bryn Mawr, April 13, 1942.

ALEXANDER C. SOPER, III.

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BUDDHIST ARCHITECTURE IN JAPAN

OUTLINE CHRONOLOGY

<i>China</i>	<i>Japan</i>
Hsia (?)	
Shang (-1122 B. C. ?)	
Chou (1122?-255)	
Ch'in (221-206)	Yamato conquest, Emperor Jimmu (orthodox date 660)
Former (Western) Han (206 B. C.-9 A. D.)	
Later (Eastern) Han (25-220 A. D.)	Emperor Jimmu (actual date c. 40 B. C. ?)
Three Kingdoms (221-265)	
Western Chin (265-317)	
Eastern Chin (317-420)	
Sung (420-479)	Northern Wei (c. 440-535)
Ch'i (479-502)	
Liang (502-557)	East and West Wei (c. 535-550)
Ch'ên (557-589)	North Ch'i, North Chou (c. 550-580)
Sui (581-618)	
T'ang (618-907)	
	Buddhism introduced from Pekche, Korea
	Asuka (Suikō, 593-644)
	Proto-Nara (Hakuhō, 645-710)
	Nara (Tempyō, 710-784)
	Early Heian (Kōnin, Jōgan; 784-897)
Five Dynasties (907-960)	Late Heian (Fujiwara; 897-1185)
Northern Sung (960-1126)	
Liao Tartar (916-1119)	

Southern Sung (1127-1278)	Chin Tartar (1115-1234)	Kamakura (1186-1334)
Yüan Mongol (1271-1368)		
Ming (1368-1644)		Muromachi (Ashikaga, 1334-1573)
		Momoyama (1573-1614)
Ch'ing Manchu (1644-1912)		Edo (1615-1867)
Republic (1912-)		Restoration (1868-)

(Since there has been only one Imperial dynasty throughout Japanese history, a different chronological framework must be used from that which is normal for China. The most satisfactory Japanese system is a geographical subdivision, by the names of the places from which the supreme authority was exercised, whether by Emperor or Shōgun. The scheme operates satisfactorily only from the eighth century, however, when the capital was settled at Nara. Before that time the Imperial residence was too frequently shifted, for reasons of small historic importance, to contribute anything but confusion to chronology. The usual Japanese compromise is to begin with the period of reign from Asuka, exercised most illustriously by the Empress Suikō; and then for the succeeding half century to use either the name "Hakuhō" (which actually designates only one reign-era, 673-685) or the modern term "early Nara." The latter is misleading, since the Imperial capitals of the time were actually in various places, like Ōtsu on Lake Biwa, and not yet at Nara. I have therefore substituted my own term, "proto-Nara," which suggests a period of preparation without being too specific in a geographical sense.)

AN HISTORICAL INTRODUCTION

In the year 552 of the Christian era, the king of the Korean kingdom of Pekche 百濟 despatched a mission to Japan, requesting the aid of the island monarchy against the attacks of his hereditary enemies to the north and east, Kokuli, 高句麗 and Silla 新羅. Japan had for many generations maintained a foothold opposite her own shores on the Korean peninsula, from which to intervene in the affairs of the mainland through war or diplomacy. In the long rivalry between the three Korean kingdoms, her assistance in maintaining a balance of power had been given most frequently to Pekche in the Southwest. At the middle of the sixth century, the two realms were linked by a long tradition of cooperation and royal intermarriage. It was in recognition of this ancient friendship, as well as in the hope of continued assistance in the future, that the king of Pekche sent with his emissaries to the Japanese court, the most precious of gifts: a means of acquaintance with the religion of Buddha, triumphant everywhere else in the Far East, but as yet unknown in Japan. In the words of the early Japanese history *Nihon-shoki* 日本書記 the envoys brought "as a present to the Emperor an image of the Buddha Shaka in gilded bronze, several banners and canopies, and a number of scrolls of canonical books. Separately was presented a memorial in which (the Korean king) praised the merit of diffusing religious worship abroad, saying, 'This doctrine is above all others the most excellent . . .'"¹

The introduction was received in Japan with mixed emotions. A conservative faction in the court vehemently opposed any corruption of the ancient faith of the land by alien practices. The strength of this party lay in its heads, the two great families of Nakatomi and Mononobe, with their hereditary functions of providing Shinto liturgy and palace protection. Their influence was great enough under the emperor Kimmei (539?-571?) to prevent any formal acceptance of Buddhism by the state. Instead, the image and its paraphernalia were turned over to the chief of the rival faction, the Chancellor Soga no Iname, who made his own mansion of Mukuhara a chapel to receive it; thereby creating "Mukuharadera," 向原寺, the first Buddhist temple in Japan.

For a generation, the new religion provided merely the crux of antagonism between the two court parties. A pestilence soon broke out, and was duly attributed by the conservatives to the anger of the native gods at the presence of an intruder. The Nakatomi and Mononobe rose briefly into the ascendant. "Officials took the image of Buddha and threw it into the waves of the canal of Naniwa (present Ōsaka). Also they set fire to the chapel, *garan* 伽藍, and burned it until nothing was left."¹

¹ The first introduction, *Nihon-shoki* for Kimmei-tennō, 13/10 (edition of *Kokushi-taikei* 國史大系, i, p. 331). Mukuharadera and the first proscription, *do.* p. 332. Cf. translation by Aston, W. G., *Nihongi*, in "Transactions and Proceedings of the Japan Society, London," 1896; vol. ii, pp. 65-67. For general historical summary, cf. *Japan, A Short Cultural History*, by Sansom, G. B., New York 1931, pp. 62 ff. For year by year account, cf. *Early Japanese History* by Reischauer, R. K., Princeton, 1937.

Under the next emperor, Bidatsu (572?-585?), the proscription was relaxed; and with Korean encouragement and the active partisanship of the Soga clan, the new faith was admitted again as an experiment. In 577, "the king of the land of Pekche presented to the Emperor, through the returning (Japanese) envoys Prince Ōwake and his companions, a number of scrolls of canonical books, together with six persons: an ascetic, a practiser of meditation, a nun, a reciter of *dharani* spells, a maker of Buddhist images, and a temple architect 造寺工. Subsequently a temple of Prince Ōwake was established at Naniwa."² In 584 the then head of the Soga clan, Umako, obtained two images from persons returning from Pekche, and with these as a basis set out to establish the faith along more orthodox lines. His principal helper was an emigrant from south China named (in Japanese pronunciation) Shiba Tattō 司馬達等, himself a practising Buddhist. A search was made throughout Japan for monks to preside at the new center of worship. Only one was found, a Korean from Kokuli, who had returned to secular life. Under the cogent persuasion of the Chancellor, he retired again from the world, and consecrated three maidens (all of foreign descent, and one the daughter of Tattō) as nuns. Soga no Umako, like his father, built a chapel, *Butsuden* 佛殿, in connection with his own mansion. Here he entertained the three (possibly somewhat bewildered) nuns at a maigre feast held in accordance with the scriptures. "On this occasion, Shiba Tattō found a Buddha relic on the food of abstinence, and presented it to the Minister Umako." The latter, failing to smash it with a sledge hammer, accepted it as genuine. "In consequence . . . he believed in the Buddhist teachings, and practised them unremittingly. At his mansion of Ishikawa he built another Buddha chapel. From this arose the beginnings of Buddhism." In 585, as a climax, "he erected a pagoda, *tō* 塔, north of the hill of Ono; and having held a general meeting to partake of maigre food, deposited the relic which had been obtained by Tattō on the top of the (central) pillar."³

This promising start was again interrupted by the hostility of the opposing court faction. A second pestilence spread, and in its turn was attributed to divine wrath. Once again the hesitant Emperor was persuaded. The rival Minister Mononobe no Moriya "went in person to the temple, *tera* 寺; and while he sat on a chair, had the pagoda pulled down, set fire to, and burned. He also burned the image of Buddha and its chapel, *Butsuden*; and having done this, he took the remains of the image of Buddha which were left from the fire, and had them thrown into the Naniwa canal." Soga no Umako he upbraided for his part in the matter; the nuns were stripped of their robes and flogged.

This was the last victory of the opposition, however, and the beginning of its eventual downfall. In spite of the obliteration of alien worship by fire and water, the signs of divine dissatisfaction continued. Sores broke out on the Emperor, on the Minister Mononobe no Moriya, as well as on many others. It began to be whispered that these afflictions were a punishment for the treatment inflicted on the Buddha. The Emperor, persuaded now in the opposite direction by the keenest personal discomfort, returned to the Soga clan his license for private worship. "The three nuns were given back to Lord Umako, who

² *N-shoki* for Bidatsu-tennō, 6/11/1, p. 353, for second mission from Pekche; Aston, p. 96.

³ *Do.*, 13/9 and 14/2/15, pp. 358-9; Aston, pp. 101-2.

received them with rejoicing . . . He built them a temple, *shōja* 精舍, anew, into which he welcomed them, and provided them with sustenance."⁴

The Emperor died none the less. The brief reign of his successor, Yōmei (585?-587) ended in an Imperial conversion, however. At this sign of the waning of their influence, the conservatives rose in open rebellion in 588. A pitched battle took place between the private army of Mononobe no Moriya and the allied forces of the Imperial Princes and the Soga clan. At first the Mononobe prevailed. "The Imperial Prince Umayado (i. e. Shōtoku) . . . who was following in the rear of the army, pondered in his mind, saying to himself, 'Are we not on the brink of defeat? Without prayer, we cannot succeed.' Therefore he cut down a *nuride* tree, and swiftly fashioned images of the Four Heavenly Kings, Shitennō. Placing these on his topknot, he uttered the vow, 'If we are now made to gain the victory over the enemy, I promise faithfully to honor the Four Kings, guardians of the world, by building for them a temple with a pagoda 寺塔.' The Minister Soga no Umako also uttered a vow, 'O all ye Heavenly Kings and great Divine Monarchs! Aid and protect us, and make us gain the victory! If this prayer be granted, I will erect a temple with a pagoda in honor of the Heavenly Kings, the great Divine Monarchs, and I will propagate everywhere the Three Precious Things'."⁵ The Buddhist party thereupon prevailed; the leaders of the opposition were slain, and their possessions were distributed. Buddhism was at last free to spread without hindrance; to spread the more rapidly because of the debt of gratitude owed it by the leaders of the victorious party.

In 588 a new mission from Pekche made available not only additional monks, but also—most providentially—two temple architects, an expert in casting pagoda spires, expert tilers, and a painter 寺工, 鎚盤博士, 瓦博士, 畫工.⁶ After the defeat of Mononobe no Moriya, a temple to the Four Heavenly Kings, Shitennōji 四天王寺, had been erected in the vicinity of modern Ōsaka. Probably because the subsequent arrival of expert Korean craftsmen opened far greater possibilities of achievement, this first establishment was abandoned; and in 593 a second construction was begun, on a new site—that still occupied by Shitennōji today in Ōsaka.⁷ Several years before this, in double fulfilment of his vow, Soga no Umako had projected another large establishment, Hōkōji 法興寺, in the then capital of Asuka. Under the reigns of the Emperor Sushun (587-592) and the Empress Suikō (592-628), the *Nihon-shoki* contains many entries relating to the latter. Thus the year 588 records its start; 589, the despatching of men into the mountains to "secure timber for the erection of temples, *tera*"; 592, the completion of the Buddha hall and its surrounding cloister galleries 佛堂與步廊; 593, the placing of relics of the Buddha inside

⁴ The second proscription, *do.*, p. 359. The reinstalment, *do.*, 14/6, p. 360. Aston, pp. 103, 104.

⁵ *Do.*, Sushun-tennō, 1/7, pp. 366-7; Aston, p. 113.

⁶ *Do.*, first year, p. 369; Aston, p. 117. The latter's translation speaks of "temple carpenters . . . a man learned in the art of making braziers and chargers . . . men learned in pottery." It seems to me, however, that the whole group was clearly one of experts in the building trades, rather than a mixed assortment of craftsmen. *Rōban* 鎚盤, Aston's "braziers and chargers," must be a phonetic equivalent (of the sort very common in early Japanese attempts to handle Chinese characters) for *rōban* 露盤, or pagoda spire disk. The group included all the technical knowledge necessary to erect Buddhist buildings—with the exception of masonry, which in Japan has never been a craft of major importance.

⁷ *Do.*, first year, and Suikō-tennō 1/9, pp. 367, 373; Aston, pp. 115, 123.

the foundation stone of the central pillar of the pagoda, and the raising of the pillar; 596, the completion of the monastery, and the installation therein of two Korean monks.⁸

A new era had opened for the imported religion, which now had secured not only the approval of the Empress Suikō, but the active encouragement of the Regent, Prince Shōtoku; the same prince who had placed the images of the Four Heavenly Kings in his head-dress, and whose enthusiasm for the faith was to lead to his eventual canonisation as the first "saint" of Japanese Buddhism. An entry in the *Nihon-shoki* for 593 states that "the Empress instructed the Imperial Prince and the great ministers to promote the prosperity of the Three Precious Things. At this time, all the ministers and administrative officers vied with each other in erecting Buddha shrines, *Busssha* 佛舎, for the benefit of their lords and parents. These were called temples, *tera*."⁹ In 623 the outward signs of the spread of the faith had so multiplied that it was considered necessary to make an official inspection of Buddhist establishments throughout the country, to record the history of each, the number of religious in its service, and the circumstances under which they had taken orders. There were in that year 46 temples, housing 816 monks and 569 nuns.¹⁰ In 691 the number of temples had risen to 545.¹¹ In the eighth century, under a succession of rulers of more than usual piety, the support and propagation of Buddhism became a primary concern of the state, and one of its gravest items of expense. All previous limits were left far behind in the number of temples maintained, the extent of their geographical distribution over the whole of civilized Japan, and the great size of those surrounding the Imperial capital.

The texts which indicate the gradual strengthening of Buddhism's foothold in Japan, suggest at the same time a well-marked evolution in the character of the architecture which served it. The "first temple," Mukuharadera, can have been no more than a dwelling roughly adapted to religious use by a simple altar and the "banners and canopies" sent from Pekche in 552. The word *garan* used to describe it normally means a fully-equipped monastery, the Indian *saṃghārāma*; applied to Soga no Iname's primitive chapel, it is an absurd misnomer. Umako, in the next generation, began with the advantage of an acquaintance with persons familiar with continental Buddhist, and may well have made use of the "temple architect" sent from Pekche in 577. There is no indication in the history that his first private chapels were any more elaborate than his father's. A pagoda, however, was something entirely new to Japan; and his erection of the first, in 585, marks a second stage of knowledge. The third stage was made possible in 588 by the arrival from Korea of a number of technicians expert in all the major departments of orthodox temple building. Doubtless it was their assistance which made possible the planning and completion of the first two fully-equipped monasteries in continental style, Shitennōji and Hōkōji. By the end of the sixth century, continental architecture as well as the continental

⁸ 588, *do.*, Sushun-tennō first, p. 367; 589, *do.*, 3/10, p. 370; 592, *do.*, 5/10, p. 371; 593, Suikō-tennō 1/1, p. 372; 596, *do.*, 4/11, p. 373; Aston, pp. 117, 118, 119, 121, 122, 124.

⁹ *Do.*, Suikō-tennō 2/2, p. 373; Aston, p. 123.

¹⁰ *Do.*, 32/9/3, p. 394; Aston, p. 153.

¹¹ *Fusō-ryakki* 扶桑略記 for Jitō-tennō sixth (a compilation of records of Japanese Buddhism, by priest Kōen 皇圓 in 1145-50). Not mentioned in the *N-shoki*.

religion had secured a firm foothold in Japan, and the basis for future development had been established. The *Nihon-shoki* entry for 593 suggests the newly-glimpsed orthodoxy in terminology as well as in architectural forms. The earlier establishments of the Soga had been called *garan*, *tera*, *shōja*, or *Busssha*, as the naive fancy of the annalist saw fit and without any clear sense of the meaning of the terms used; thereafter the single name *tera* 寺 was to become the standard, to describe a well-established standard in building.

The introduction of Buddhist architecture into Japan, taking place in the last quarter of the sixth century, was at the same time a first introduction to monumental architecture in general. More than this, it was the beginning of Japanese architectural history.

Buildings had of course existed in Japan before the sixth century, and centuries of building practise had evolved a national style which may well have been of great beauty and interest. Very little is known about this earliest Japanese architecture, unfortunately.¹² A few facts may be gleaned from phrases scattered through the histories. Crude approximations of its general outlines are given by pottery tomb models and by line drawings on early mirrors. In addition, the tradition of the pre-Buddhist style has survived to modern years in the forms of a few Shintō shrines, the most ancient and conservative in Japan, which have been rebuilt, time after time, in a ritually scrupulous imitation of the past. The architecture of which these various forms of evidence afford a partial glimpse, was the antithesis of the monumental. It was an architecture almost entirely without history.

The Shintō shrine types which seem to go back to the earliest period of the Japanese race, are all buildings of the utmost simplicity in design and construction (figs. 1, 2). Wooden posts and beams support a gable roof—shingled in historic times, earlier doubtless covered by the more primitive thatch or bark—with complete directness and economy. The plan of the individual shrine building permits no more complication than a single interior column—as in the Izumo-taisha 出雲大社—which divides the sanctuary space into two rooms of equal size. Elements are few; the scale is normally small, going only by exception very far beyond the dimensions of a primitive dwelling. All materials must have been furnished originally by trees, their bark, and strong vines to tie the members together, bamboo, or rice straw. In the originals, there can have been no decoration of any sort. Even the modern replicas, in which a few concessions have been made to the taste of later ages—curves in the roof line and verandah railings, gold fittings, etc.—are strikingly austere in comparison with the rest of Far Eastern architecture, of whatever type. The modern shrines enclose these aboriginal sanctuaries in elaborate complexes, with subordinate buildings, gates, palisade walls, and galleries, carefully laid out on axial ground plans. It is impossible to imagine these accessories as playing any role in the shrine precincts of pre-Buddhist times. They are clearly the additions of a more sophisticated age, imitating the monumentality and the complex general plans of Buddhist monasteries. The early shrine must have been as simple and primitive in the arrangement of its sacred precinct as in the construction of its sanctuary.

¹² Cf. illustrations in *Nihon-shaji-kokenchiku-kanshiki-shiryō* 日本社寺古建築鑑識資料, by Masuyama 増山, Ōsaka 1935, pp. 24-5. Also Sekino T. 関野, "Architecture de l'époque préhistorique" (in Japanese), *Tōyō Bijutsu* 東洋美術, Numéro Special 1, Nov. 1930.

The Shintō shrine, reaching back in its traditions to the dawn of Japanese civilization and the coming of the Yamato race—to a period, that is, somewhat later than the 660 B. C. of orthodox chronology, but still well before the Christian era—and frozen in its earliest mold by religious conservatism, must undoubtedly have been in later centuries the most primitive of major building types. The great mansions of the aristocracy and the royal palaces must have been much more complex, both in the design of individual buildings and in the combination of elements within a general residential compound. The gap in scale and degree of elaboration must have widened slowly with the passage of time. Steps in the process may be imagined from brief historical references. In the reign of Sūjin-tennō (c. 230-258 A. D. by revised chronology), a great plague devastated the realm. In the midst of a general dread of unseen powers, the Emperor came to fear the proximity of the two great deities who had been worshipped together in the great hall of the palace, the Sun Goddess Amaterasu-ōmikami 天照大御神 and the territorial divinity Yamato-no-ōkunidama-no-kami 倭大國魂神. Accordingly he removed their cults to a safe distance, making his own daughter the high priestess of a special shrine to the Sun Goddess; which in the reign of his successor Suinin-tennō (c. 259-290) was established permanently at Ise.¹³ As late as the middle of the third century of our era, therefore, we may presume that "shrine" and "palace hall" were almost interchangeable terms in Japanese architecture (as "palace" and "ancestral temple" had been in China at the beginning of Chou). It is reasonable to suppose that the Emperor who dispossessed the Sun Goddess was prudent enough not to make her new home any less regal than the one to which she had been accustomed in previous generations; and so if we accept the tradition that her existing Ise shrine reproduces something very like its original form, we possess fairly good evidence for the simplicity and small scale of palace design at the time of its first erection.

The subsequent evolution of the Japanese palace to a stage well beyond that of the shrine, was doubtless accelerated by the opening of close communications with Korea. The *Nihon-shoki* records that in the 31st year of Ōjin-tennō (by orthodox dating 300 A. D., by the revised chronology at the end of the fourth century), the king of the Korean realm of Silla sent skilled carpenters as "tribute" to the Japanese court; these were settled in a body in Settsu province to form a hereditary guild called the Inabe 猪名部.¹⁴ The greater technical proficiency made available by this contact with continental experience is suggested by a later entry in the same history: in his 12th year, the Emperor Yūryaku (revised, c. 457-489) "commanded that the carpenter Tsuge-no-mita 關鷄御田 (one version makes this 'the carpenter Inabe') should begin the erection of a two-storeyed pavilion 樓閣."¹⁴ This must have been already a long way beyond the gabled box of the Shintō shrine type. The forms taken by such palaces—the greatest achievements of architecture in pre-Buddhist Japan—must remain conjectural, however, for want of any more definite

¹³ *N-shoki*, Sūjin-tennō sixth and Suinin-tennō 25/3/10, Aston, pp. 151, 176. See also abbreviated notices of shrine histories in the historical dictionary *Kokushi-daijiten* 國史大辭典, Tōkyō, 1936.

¹⁴ *N-shoki*, Ōjin-tennō 31/8, and Yūryaku-tennō 12/10/10, pp. 188, 251; Aston, vol. i, pp. 268-9, vol. ii, p. 359. The latter story as told in the history suggests the rarity of such lofty structures at the time. "Mita ascended this high building, and ran about nimbly on all sides as if he were flying. A serving-maid from Ise looked up to the top of the lofty edifice, and marvelled at his nimble movements, so that she fell down on her face in the courtyard and upset a dish of meat which she was serving to the Emperor."

evidence than scattered references of this kind. Much may legitimately be surmised from a knowledge of the way the Japanese have always built, when truest to their own national tastes; from a collation, that is, of the fundamentals which are common both to the primordial shrine types and to the domestic architecture of recent centuries. The pre-Buddhist palaces must have been built lightly and economically, for each served only a single Emperor and was abandoned at his death. As in the case of the earlier shrines, the materials used must have been entirely vegetable, and doubtless were left unpainted; palace names like "Asuka-no-itabuki" 飛鳥の板葺, an Imperial residence at the mid-seventh century, indicate the use of board roofing. The first sign of the use of a tiled roof, with all the consequent implications of heavy, expensive, and permanent construction, appears only in 655, after the precedent had already been established in two generations of Buddhist monasteries.¹⁵ Until the influence of continental fashions became overpowering, again, the disposition of individual buildings to form a palace group must have been informal and picturesque.

The element of history, the possibility of tracing some sort of historical development, is a very small part of this architecture. Hypotheses may stand on a reasonably solid basis in the last centuries of the pre-Buddhist era, when palace design, at least, must have veered toward the continental standard. For earlier centuries, and particularly for the creation of the primitive shrine types, almost no facts are available, and criticism must float in the windy sphere of theory. Thus it is chiefly by the method of stylistic comparison that the principal shrines have been arranged in a plausible order of evolution.

The most primitive type known today is the so-called *Ōyashiro-zukuri* 大社造, exemplified in the Izumo shrine (fig. 1). The building stands end on, and is entered through a door to the right of the central pillar; inside there is only a single pillar in the middle, and a partition which screens the rear of the room from the doorway. Appropriately, this shrine is also the oldest, reaching back to an age before the Yamato conquest when the histories are purely mythological.

A step in advance is represented by the *Ōtori-zukuri* 大鳥造 of the Ōtori shrine in Ōsaka; unfortunately without benefit of historical record. Here there are two columns in the gable facade and inside, instead of one, so that it is possible to have axial doorways. Furthermore, the screen inside has become a partition, separating the building into two rooms. In the Sumiyoshi shrine 住吉神社 outside of Ōsaka, the same sort of scheme has been applied to a sanctuary four bays deep instead of two. This latter shrine is supposed to have been founded during the reign of Empress Jingō (revised, c. 368-380).¹⁷

In the *Shimmei-zukuri* 神明造 represented by the two Ise shrines, the building has been turned around, so as to be entered from the center of a long side, instead of from the gable end: a change which at last aligns the Shintō shrine with general building practise in the Far East (fig. 2). The type, as we have seen, is probably related to palace architecture of the mid third century.

Going in the opposite direction, it has seemed as if the prototype for the *Oyashiro-zukuri*—a house for the Izumo god differing only in size from the homes of the common

¹⁵ Do., Saimei-tennō 1/10/13 (655 A.D.), p. 458; Aston, ii, p. 249. "There was a palace under construction at Ōharida which was meant to be roofed with tiles. . . ."

men who worshipped him—may have been an even more primitive dwelling, without any walls: a tent-like shelter, merely, set up on the ground, the sloping sides framed with bamboo and covered with straw, and a central post at either end to hold the bamboo ridge-pole. The entrance to such a dwelling would naturally be on the end, to one side or another of the central post. The bamboo poles, slanting against each other and crossing at the top, would explain one of the most characteristic features of ancient Shintō design, the so-called *chigi* 千木 timbers protruding like scissor blades above the ends of the ridge. A hypothetical shelter of this sort would have been easy to set up, and equally easy to dismantle and transport to some other site for temporary use. Circumstances might require it to be at one time comparatively large, at another comparatively small; it would have been much more reasonable to use poles of the maximum length and let them cross beyond the ridge, if extra height were not needed, than to fix a dimension arbitrarily by cutting them off. In the subsequent development of the Shintō shrine, this once practical expedient was retained—doubtless by priestly conservatism—as a formal attribute entirely without functional meaning; and so in the end might be separated entirely from the gable construction, to become a sort of finial at the end of the ridge.

The bamboo and straw house imagined as a prototype for the Izumo shrine is not merely a theoretical reconstruction. The same form exists today in many parts of Japan, as a shelter set up alongside the rice-fields for a month's use every autumn (fig. 3). It bears a curiously suggestive generic name, which has been part of the craft language of Japanese carpenters for an unknown number of generations: *Tenchi-gongen-no-miyazukuri* 天地權現宮造, the "palace style of the deities of Heaven and Earth."

All this imagined course of development is quite possible. It must remain very largely theoretical, for want of more definite evidence. The chronological data furnished by written history is meagre, and of only secondary importance. No one would suppose, for example, that the architectural type of the Sumiyoshi shrine was created as late as the fourth century A. D., even though texts say the god was first worshipped at that time. Shrine architecture must have been already very old in the fourth century, with a traditional repertory of forms from which to choose. How the choice was made, and the factors which determined it, are unknown, like almost every other historical detail. Japanese architecture before the introduction of Buddhism was too little self-conscious to require description or record, except in the most general terms.

The architecture which entered Japan with Buddhism was in contrast highly monumental, sophisticated, and self-conscious. As later chapters will make evident, it was a Chinese architecture; modified perhaps in some details by Korean taste and in others by the Indian religion which it served, but fundamentally Chinese, and as ancient and highly developed by the sixth century A. D. as Chinese civilization itself.

No other civilized art in China was earlier in formation than its architecture. The recently excavated ruins of the Shang dynasty capital at An-yang, dating perhaps earlier than the twelfth century B. C., have disclosed a building style already mature in design and bold in the scale of its construction. One palace hall still traceable by its platform foundation and stone pillar bases was over 90 feet long.¹⁶ The symmetrical arrangement

¹⁶ Creel, H. G., *The Birth of China*, New York, 1937, p. 65, fig. 1.

of its lost wooden columns must have produced an exterior appearance, and an interior arrangement of beams to support the roof, corresponding in essentials to the formulae still in use today (fig. 31). The stone column bases found in this ruin were paralleled, in other remains at An-yang, by bases of bronze, a sign that Chinese architecture at the middle of the second millennium before Christ was already a medium for the expression of ideas of splendor and extravagance.

The succeeding Chou dynasty has as yet provided no ruins, but is rich in literary references to the building forms of the time. Many of these—particularly those furnished by the books of ritual—are obscurely phrased in an obsolete terminology, and hence are difficult to understand; they make clear at least that the major architecture of the period, whether mansion or ancestral temple, was laid out with inflexible symmetry along a south-to-north axis; and that its principal buildings were grouped about a courtyard, with a gateway at the south and the main hall raised on a platform to the north, precisely in the fashion of monumental architecture in China in every succeeding period to the present.¹⁷ Writings of the latter part of the Chou make occasional reference to an increasing elaboration of decorative detail. The use of tile roofs and of painted wooden members contrasting with white plaster seems to have been already established, and used as a means of differentiating degrees of rank.¹⁸ Further adornments were cited by the orthodox as signs of a

¹⁷ There is as yet no clear evidence that the principle of orientation toward the south was dominant in Shang architecture, as it came to be in later China. The An-yang hall published by Creel faces to the east; in default of more precise information, it is impossible for me to say whether this is proof against a southward orientation, or merely so because the existing ruin originally formed part of a larger courtyard scheme, in which the principal position and southern facade was allotted to a still larger hall, now lost completely.

Shang graves at An-yang, with their ramps on four sides, show at least a marked respect for axial symmetry, as do the bronze vessels of the same period. As for the early Chou, it is certainly a symmetrical city plan whose laying out is described in the ode of King Wên in the *Shih Ching* (Legge, *Chinese Classics*, iv/2, pp. 438-9):

"He encouraged the people and settled them,
Here on the left, there on the right.
He divided the ground into larger tracts and smaller portions,
He dug the ditches, he defined the acres;
From the west to the east,
There was nothing which he did not take in hand."

The description is doubtless of no value for the city which the Chou ancestor T'an-fu is supposed to have founded; that leader who made "kiln-like huts and caves" for his people, "before they had any houses." It must, however, be a summary of the city plan which was current during Western Chou, when the ode was composed. The bare indications given here of symmetry and southward orientation, are much amplified and made explicit in the *K'ao Kung Chi* 考工記 chapter of the *Chou Li*—usually thought to go well back into Chou—and are requisites of the Chou ceremonies described in the books of ritual in general.

¹⁸ *Ch'un Ch'iu*, *Ku-liang Chuan*, 23rd of Duke Chuang: "It is proper for the pillars 楹 of the Son of Heaven and of the feudal lords to be painted black 黝, for those of the great officers to be green 蒼, and for those of patricians in general to be yellow 赭. Red 丹 pillars are improper."

The absence of any roofing tile fragments at An-yang, and the evidence of early Chou odes indicate that roofs were still covered with thatch or boards. Tiling was normal for monumental architecture by Han, and seems to have become prevalent in late Chou. The *Tao Chuan* for 544 B.C. (Duke Hsiang 28th), describing a murder which took place inside the ancestral temple of the duke of Ch'i, uses the architectural

reprehensible waste and ostentation. Confucius spoke with disfavor of a man whose house was provided with "mountain capitals and pondweed kingposts" 山節藻梲; in the same vein, the *Tso Chuan* criticizes a duke of Lu who flouted propriety by adding carving to the rafters of his ancestral temple, and a duke of Chin who spent the proceeds of his heavy taxes on sculptured walls.¹⁹

All these phenomena were signs of a constantly increasing standard of magnificence in princely architecture. The ascent came to its first climax with the consolidation of the old feudal states under the first empire, Ch'in. The First Emperor, Shih Huang Ti, inheriting all the love of splendor and luxury which the Confucianists had so deplored in the feudal aristocracy before him, won by his conquests the privilege of indulging these tastes on a previously unimagined scale. In his new capital of Hsien-yang, he set up along the bank of the river a series of palaces for his pleasure and as a symbol of victory, one for each of the conquered feudal states, copying the palace apartments of the lord whom he had destroyed. All these "halls, with their two-storeyed connecting galleries and the verandahs set around them, were linked together, 殿屋複道周閣相屬 and were filled with the beauties, the drums, and the bells taken from the feudal princes."²⁰ The peak of this imperial building enterprise was reached in the palace called O-pang-kung 阿房宮 which he laid out in the midst of the hunting preserve on the other side of the Wei river from Hsien-yang; a palace never completed, which was destroyed at the downfall of the Ch'in and is said to have taken three months to burn down. The Hall of State, Ch'ien-tien 前殿 here was 500 paces from east to west, and 500 feet from north to south. Ten thousand men might sit within it, and beneath it might have been set up a flag-staff 50 feet high. The surrounding carriage avenue was treated as a covered gallery; this led from the foot of the hall in a

term *mêng* 甍. This seems clearly to mean the ridge. In the Han dictionary *Shuo Wên* it is equated to the usual characters for purlin, *tung* 棟, or for ridge-pole, *chi* 極; and in the Han dictionary *Shih Ming* 釋名 it is described as the "back 背 of the roof." The character comprises an upper portion with the meaning "to cover," and the radical for tile, and so suggests the typical Chinese tile-covered ridge of later times. The distinction between *mêng* 甍 and *tung* 棟 is explained by the Ch'ing commentator to the *Shuo Wên*, Tuan Yü-ts'ai 段玉裁: "*Tung* is so named from the standpoint of the roof interior, and so has the wood radical. *Mêng* is so named from the standpoint of the roof exterior, and so has the tile radical."

The development of tiling in China is discussed by Naba 那波, "*Shina ni okeru yane-gawara shiyō no kigen ni tsuite*," *Shinagaku* 支那學, ii/8. He suggests that a place name of the Ch'un Ch'iu period, Wu-wa 屋瓦, literally "roof tile," was given because the houses there were tiled, and that this was sufficiently unusual to attract notice. Numerous ornamental tile-heads have been unearthed at supposed Chou sites, with patterns—usually the *t'ao-t'ieh*, sometimes affronted dragons, etc.—which resemble those on bronzes of the "late Chou" type. Cf. Itō 伊藤, *Shina no Kenchiku*, Ōsaka, 1929, fig. 106; Umehara 梅原, *Shina-kokogaku-ronkō* 論攷, Tōkyō, 1938, pl. 106.

¹⁹ *Lun Yü, Kung Yeh Ch'ang* 公冶長, 17; *Tso Chuan*, 24th of Duke Chuang, 2nd of Duke Hsüan. These had been part of the old Chou royal insignia, so that it was an act of usurpation which was criticized by Confucius. The "mountains" may have been something like the undulating motif much used on "middle Chou" bronzes. "Pondweed," often mentioned in the Odes, may have been used as a symbolic defense against fire; the Later Han *Feng Ssu Tung I* 風俗通義 ascribes this function to carvings of other aquatic plants (quoted in the Sung architectural encyclopedia *Ying Tsao Fa Shih* 營造法式, ii, under 闔八藻井); but the complete absence of vegetable forms from the known repertory of Chou art makes this interpretation questionable. At least by Han, the character meant simply "ornamented."

²⁰ *Shih Chi*, 26th year of Shih Huang Ti.

straight line clear down to the Southern Mountain, on the top of which a look-out tower was placed. Covered galleries in two tiers, leading from the O-pang-kung, crossed the Wei River to join it to Hsien-yang, taking their form from the covered bridge of T'ien-chi which crosses the Milky Way and ends at the constellation Ying-shih. . . .²¹ Here, at the end of the third century B. C., the standard was established for all subsequent monumental architecture of the first rank in China. The dimensions given are perhaps incredible; the Chinese are inclined to hyperbole in their use of numbers, and the memory of the exploits of Ch'in Shih Huang Ti must have merged very early into myth. It should be remembered, however, that the Ch'in foot was only about three-quarters the present measure.²² The description of the hall at least shows that it was a marked oblong in plan—the "pace" 步 being equal to six feet—and that it faced to the south, from the top of a high platform, like the great state apartments in the Peking palace of today (fig. 4).

The new concept of imperial dignity and power created by Shih Huang Ti survived the collapse of his own dynasty. Under the Han, the tradition of magnificent building which he had initiated was carried on, hardly with any increase in scale, but toward the completion of style which the Ch'in had had too little time to accomplish. The association of the Throne with a standard environment of size and luxury had indeed become so inevitable as to withstand an Imperial preference for greater simplicity. The *Shih Chi* tells that the first Han Emperor, Kao Tsu, delegated the building of one of his palaces at Ch'ang-an to a general. "In (200 B.C.) Hsiao Ch'êng-hsiang built the Wei-yang Palace 未央宮, setting up the gates and their lookout towers on the north and east; the Hall of State; the arsenal; and the great storehouse 立東闕北闕前殿武庫太倉. Kao Tsu on his return saw that the buildings and towers were of very great size. He spoke angrily to Hsiao Ho, saying, 'The whole world has been reduced to beggary, through the agony of many years of war. Our success or defeat is still uncertain. Why do you then undertake (to build) palace apartments on so excessively large a scale?' Hsiao Ho answered, 'The quarters of the world are not yet settled, which in itself is a reason for turning to palace apartments. Moreover, the Son of Heaven has for his house all within the Four Seas; without great size and beauty, he would lack a means of inspiring awe. Finally—do not bring it about that your descendants will have to add to your work.' Kao Tsu at that was content."²³

The achievements of architecture and decoration in the service of the great, during the Han dynasty, were so phenomenal as to become for the first time a major subject of literature. Contemporary records and works compiled in the centuries immediately following the Han, are thus detailed, beyond any previous precedent, in their architectural references. One important source, the *San Fu Huang T'u* 三輔黃圖, deals entirely with the monuments and topography of the Western Han capital, Ch'ang-an; and although the date of compilation may be as late as the T'ang dynasty, it stands as comparatively accurate

²¹ *Do.*, 35th year.

²² Cf. Fujita, "Shaku no kenkyū," *Shirin* 史林 x/1, pp. 46-7. Measures were standardized by Shih Huang Ti in his 26th year, probably for the first time all over China. Fujita believes that the foot measure then established must have been long in use, and approximately equivalent to that of Han.

²³ *Shih Chi*, 8th year of Han Kao Tsu.

from the fact that much of its information may be checked by earlier descriptions.²⁴ From this, we learn the gridiron layout of the metropolis itself, with its walls, gateways, great and lesser avenues, bridges, and market-places. Various sources give details concerning the enormous Imperial palaces, located both inside and outside the city walls. Of the Wei-yang Palace, once criticized by the first Han Emperor, the *Hsi Ching Tsa Chi* 西京雜記 states that it was 22 li roundabout, and was enclosed by 70 li of avenues and roads (one li equalled 1800 Chinese feet 尺. The Han foot being approximately three-quarters the present, which is approximately equal to the English foot, one Han li must have equalled about 1350 English feet, or one-quarter mile). "There were 43 high terraces and halls 臺殿, of which 32 were 'exterior' (in the public portion), while 11 belonged to the rear palace (with the private apartments of the Imperial household). There were 13 lakes and six hills, one of each of these also being located in the rear palace. Of gateways and look-out towers there were in all 95."²⁵

The perimeter of the present "Forbidden City" in Peking is about two miles, as against the five and more of the Wei-yang; but the comparison is not entirely fair, since the Han compound seems to have included the open park features of hills and water which in Peking form a separate enclosure to the west.

Concerning the Hall of State of the Wei-yang Palace, the *San Fu Huang T'u* gives the dimensions: length east to west, 500 feet; depth north to south, 150 feet; height, 350 feet. The hall of the Ch'ang-lo Palace 長樂宮, also erected under Han Kao Tsu, is said to have been 497 feet by 120. Reduced by the change in standard from Han to the present day, these lengths are by no means incredible (the height dimension must have been guessed, and is less trustworthy). In modern terms, the Wei-yang hall must have been about 400 feet long and 110 deep.²⁶ The analogous building in the present Peking palace, the T'ai-ho-tien 太和殿, is only about 200 by 100 (fig. 4); on the other hand, surviving column bases prove that the Great Buddha hall of the eighth century Japanese monastery of Tōdaiji 東大寺 was originally about 290 by 170 (fig. 15).²⁷ The critical dimension in any Far Eastern building is its depth, which is dependent on the maximum length of timber available for the main girders. Additional length entails merely more material and greater expense; there is nothing improbable in the supposition that the Han empire at its height, reaching from Manchuria to Afghanistan, was capable of a greater culminating effort in this respect than the proud but tiny island of Japan. The decrease in scale in more recent

²⁴ Cf. *Ssu K'u Ch'uan Shu Tsung Mu*, lxviii. Ch'êng Ta-ch'ang 程大昌 of Sung claims that the work uses a place name which did not exist until 757, and so must have been written after that date. Another Sung critic, Ch'ao Kung-wu 晁公武, calls the unknown author a man of the Liang or Ch'ên dynasties.

²⁵ *Hsi Ching Tsa Chi*; traditionally by Liu Hsin 劉歆 (Western Han) or by Ko Hung 葛洪 of Chin, whose name appears on some versions. A third opinion holds that the latter's name was borrowed by Wu Chün 吳均 of Liang, the true author.

For general discussions of Han palaces, cf. Itō, *Shina no Kenchiku*, pp. 574 ff.; and Liu Tun-tsêng 劉敦楨, "Ta Chuang Shih Notes" (in Chinese), *Bulletin of the Society for Research in Chinese Architecture*, iii/3, Sept. 1932, pp. 147 ff.

²⁶ Cf. Liu, *op. cit.*, p. 160.

²⁷ Cf. Sato 佐藤, *Dainihon-kenchiku-zenshi* 大日本建築全史, Ōsaka, 1933, p. 126. The dimensions recorded in the standard measure of the Nara period were 290 by 170. The Nara (Tempyō) foot was about 0.02 ft. shorter than the present *kyō ku-shaku* 曲尺, which is equal to 11.93 English inches.

Chinese construction must be a direct result of deforestation, necessitating the transport of large timbers from an increasingly great distance, at an ever-increasing expense.

The names, even, of Han palace buildings testify to the imaginative appeal of their size and splendor. One was called the "Swiftly frisking" 騶姿, in reference to "the appearance of a horse galloping at high speed; a horse so galloping could make the round of the palace interior in a day's time, which indicates its size." Another was the "celestial beams" 天梁, indicating the height of the palace (by the metaphor of) beam timbers mounting up to Heaven."²⁸ The decoration was fabulous in its complexity and in the richness of its materials. The *San Fu Huang T'u* says of the Wei-yang hall that after it had been modernized in the reign of Han Wu Ti, "purlins and rafters were of sweet-smelling woods, beams and girders of polished apricot wood. There were gold door-knobs and jade doors, ornamented rafters with decorated caps, sculptured pillars and jade pillar bases, double-tiered porches with carved railings, (doors adorned with) carved interlaces of green, and lacquered red courtyards. . . ." ²⁹ The most detailed account of all is the description of a great building in Confucius' state of Lu, erected by an Imperial Prince in the generation of Han Wu Ti: the prose poem, or *fu*, of the Ling-kuang-tien 靈光殿, by an author of the second century A. D.³⁰ Here are mentioned not only great size and height and richness; the twilight space inside the hall mounted to the high-hung ceiling through a bewildering superposition of posts, brackets, and beams; the wooden members, in addition to their structural function, were carved in the forms of human beings or animals; and the walls bore paintings which illustrated all the history of man and all the diversity of creation. All this elaboration within the individual building, finally, was matched by the complexity of the whole Han palace compound, with its avenues and courtyards, its walls and gateways, its great and lesser halls, its observation towers (the highest of which is said to have reached 755 feet),³¹ its encircling porticoes and connecting galleries.

When the power and glory of the Han came to an end, the dismal generations which followed, racked by civil war or barbarian invasion, must have looked back on the empire as a golden age; in building they can have done little more than to imitate, on the scale of their diminished resources. The ascent toward a new cultural height must have been under way in the fifth century, when both north and south had been stabilized and their general boundaries fixed. Progress must have been markedly accelerated at the end of the sixth, with a new unification under the Sui; the fabulous ambition and extravagance of the second Sui Emperor, Yang Ti, indeed, may well have given architecture an impetus hardly less than that caused by the Ch'in a thousand years before. The second great flowering came with the long prosperity of T'ang, when it was once more possible to build from one generation to the next on the old Han scale of magnificence. The Buddhist

²⁸ *San Fu Huang T'u*, describing the Chien-chang Palace 建章宮 erected by Han Wu Ti in 103 B. C. Cf. Itō, *op. cit.*, pp. 590 ff.

²⁹ Cf. Itō, *op. cit.*, pp. 582-3; and Liu Tun-tseng, *op. cit.*, pp. 165 ff., on general subject of Han decoration.

³⁰ *Lu Ling-kuang-tien Fu* 魯靈光殿賦, by Wang Yen-shou 王延壽 (early 2nd A. D.): *Wên Hsüan* xi; translated by E. von Zach, *Asia Major*, iii, 1926, pp. 31 ff.; description of decorations translated by Chavannes, *Mission*, I, p. 31.

³¹ The "phoenix lookout" 鳳凰閣 of the Chien-chang Palace; cf. Itō, *op. cit.*, p. 591.

architecture which passed from China to Korea and thence to Japan, however, was formulated during the interregnum of the Six Dynasties, by a culture slowly working its way out of chaos. It seems to me probable, therefore, that the style which was introduced to Japan at the end of the sixth century, through the obstinate efforts of the Soga and Prince Shōtoku, can hardly have been very far advanced in constructive technique and design beyond the mature accomplishments of the Han dynasty.

The summation which I have given of the evidence for the development of Japanese and Chinese architecture before their definitive meeting at the end of the sixth century, has indicated the widest divergence of the two traditions. It is of prime importance for the subsequent history of the mixed Sino-Japanese style, to understand the extent of this difference between the two in their unadulterated forms; and to understand, again, as much as possible of the reasons behind the difference.

Much of the contrast has been of course a simple matter of relative potentiality. Japan is a small country with meagre resources; modesty and economy have naturally been her habitual virtues, and magnificence has been possible only in restricted degree, as the result of phenomenal effort. China in her periods of empire has possessed limitless resources; the tremendous size and wealth of the state has no less naturally been reflected in the scale and elaboration of its constructions. Behind this, however, there lies a more fundamental contrast; part of which must have sprung from a profound difference in racial character, as part may well have been due to an equally radical difference in environment. The ancient China of the Yellow River region is a land at once vast and pitiless. The bleak, dusty plains are without end, the mountains terrible in their height and bareness; the great, wild river rolls from its unimaginable source into the world of men, wide, swift, and irresistible; periodically, as if by intentional malice, it changes its course to the sea, and whole counties are obliterated. Summer is a time of fiery heat, winter of bitter cold; spring brings incessant winds from the Gobi desert, laden with a biting dust; every few years, again, as if by caprice, the rains fail, there is a period of drought, and thousands are driven from their homes or die of starvation. A Nature so immense and inhuman must either crush its inhabitants into fatalism or rouse them to some sort of defiance. The Chinese according to their capacities have followed one alternative or other. For men of resolution and noble mind, only one course has been possible. The earliest folk-heroes of the race were the figures not of great warriors, but of rulers who knew the arts of civilization, and taught them to the people as a means of escape from brute dependence on Nature. One of the first to emerge in popular mythology was Yü the Great, heroic because he tamed the Yellow River, and ended an age of disastrous floods. In opposition to the material world, the Chinese mind rose very early to a lofty counter-assertion of the dignity and importance of man. To Chinese thinkers of the Chou, man was not necessarily the slave of such an environment, dwarfed into utter insignificance by its size, and helpless before its haphazard violence of flood or famine. Potentially, he might be its master; not through his own efforts alone, since normal men are not folk-heroes, but as the agent, on Earth, of Heaven.

The European world has preferred to express its revolt against Nature in the most concrete terms of invention and progress. The Chinese solution has characteristically

given more emphasis to a symbolic statement of opposition than to the act itself. The Chinese were astronomers from an early date; looking daily at the sky, like all agricultural peoples, but in contrast to the majority, thinking deeply about what they saw there. They saw in the heavens an immensity greater even than that of Earth, subject to the inexorable regulations of order and law. They saw the sun rise daily in the east and sink in the west; the Pole Star stand constant among an infinity of wheeling constellations. They learned the ordered progression of heavenly movements: the brief day's circuit of the sun; the four week cycle of the moon; the long swing of the sun from north to south and back again through solstice and equinox, bringing the sequence of the seasons; the crowning interval of the year; and even vaster astronomical repetitions, reaching out far beyond a human lifetime. To the early Chinese philosophers, this tremendous order and rhythm visible in the heavens expressed all that was ideally good and beautiful. It was the symbol and source of all moral law. In contrast, the disorder and the haphazard chances of Earth must have seemed ugly and evil.

Nature, however, was not hopelessly unruly. The whole of the vegetable world in its annual rhythm of birth and decay was subject to the unchanging progress of the sun; fundamentally subject to order, that is, in spite of the accidents of flood or drought. The order which ruled in Heaven could be extended to Earth, transforming the natural chaos into something closer to the ideal. It was the privilege of man to assist in this transformation, extending and securing the operations of celestial law. Orthodox theory in the Chou period held that the one great intermediary between Heaven and Earth was the King, the Son of Heaven. On his actions alone depended much of the efficacy of Heaven's control over the brute chaos of the world. If he were virtuous and orderly in his actions and obedient to the Heavenly ideal, rain and fair weather would follow each other in proper sequence, and in perfect proportions, crops would flourish, and the people would grow fat and contented. If he were wicked and unruly, the proper order of the seasons would be upset, and the land would be visited by fearful misfortunes. Some of this responsibility even extended to the people themselves; so that by doing the proper things at the proper time they were able to insure the untroubled operation of the heavenly rhythm.

With such conceptions as the basis of their outlook on the world about them, it was natural that the Chinese should work to transform their immediate environment—their architecture—into a reflection of the divine order which was ideally to be established upon Earth. By looking at the sky, they learned first of all the quality of direction—the cardinal axes north, south, east, and west. For a people of the north, it is a matter of practical advantage to live in houses facing toward the sunshine of the south. The inflexible orientation of the heavenly bodies turned this convenience, for the Chinese, into an almost unbreakable rule. The monumental Chinese building, and the complex of which it is a part—whether house, palace, government office, or temple—always faces to the south, unless the strongest reasons of topography make this impossible. This is the first thing that literary evidence—descriptions of rituals, allusions to the layout of palace buildings, etc.—tells us about Chou architecture, a millennium before the birth of Christ, and the principle holds with undiminished strength today. From the sky, again, the early Chinese builders must have learned the principles of order and rhythm. Symmetry is the law of the human

body, and thus an elemental aspect of consciousness; the balance of night and day, or of the cold seasons with the warm, perhaps, gave this homely fact an appearance of celestial sanction, and made it proper to extend the symmetry of man himself into his architectural surroundings. From the interrelation of the movements of sun and moon, perhaps, they took their ideas of expanding rhythms: the fundamental beat of column spacing, the relationship of major and minor buildings within a courtyard, the larger rhythm of courts within the whole palace compound. The palace was thus the fundamental problem of early Chinese architecture not merely because the ruler was richer and more powerful than his subjects, but also because the attempt to reproduce the ideal order and beauty of Heaven upon Earth was naturally focussed upon Heaven's single human representative.

The ideals learned in astronomy created an architectural design which at its most characteristic has always tended toward a geometrical purity of form. The whole of Chinese architecture, as a historic unit, is fundamentally pure, in the sense that its relationships are ideal, with an existence independent of time or space. At its most characteristic, Chinese architecture shows no interest in the world around it. Its qualities—the inflexible axes, the symmetry, the mathematical rhythms, the geometrical forms—are entirely opposed to the picturesqueness of Nature. Even decoration does all it can to obscure any idea of relationship between the building and its environment; the wood members are brightly painted and stand on a stone or brick platform well above the ground level; the gleaming glazed tile roof is completely artificial in its appearance. In the great Peking palace—which in comparatively modern form reproduces the principles which must have ruled Chinese building for three thousand years—many of the courtyards contain nothing but painted wood, tile, and marble. The trees permitted in the others are merely minor variations (fig. 4). The whole scheme with its great and lesser gridirons is independent of any specific location. It could exist as well at Nanking, or K'ai-fêng, or Hang-chou, or Ch'ang-an; or on any other site not too mountainous to permit its lofty disregard of the accidents of Nature. Behind such a tradition of monumental design lies the same sort of symbolism which was applied by Pan Ku in his description of the Western Han capital at Ch'ang-an:²²

²² Pan Ku, *Liang Tu Fu* 兩都賦; *Wên Hsüan*, 1. The lengths to which such symbolism could (at least theoretically) be carried in Chinese architecture are illustrated by the story told of a building enterprise of Han Wu Ti. On a journey to Shantung, the Emperor came across the site of an ancient Ming-t'ang 明堂, the hall in which Chou rulers had carried out certain crucial ceremonies (whose nature was in later times much disputed). Wu Ti wished to preside over a similar ceremony on the ancient site, but the form proper to the Ming-t'ang had been forgotten. Finally a diagram was offered to him as representing the Ming-t'ang used by the primordial ruler Huang Ti; and this was duly erected. So far from the *Shih Chi*, Wu Ti Annals, Yüan-fêng 4th year, 4th month (107 B.C.). The *Shih Chi* briefly describes the somewhat remarkable edifice which resulted. The description appears in much greater detail in the work of the Later Han author Ying Shao 應劭 (cf. *T'u Shu Chi Ch'êng*, 禮儀典, 170, 明堂祀部): "The Ming-t'ang is 144 feet square; square as a symbol of the Earth, this plan imitating the female, earthly principle K'un 坤. The roof is round, with a lintel diameter of 216 feet; this plan imitates the male, celestial principle Kan 乾, for roundness is a symbol of Heaven. The apartments 室 consist of nine shrines 宮, imitating the Nine Divisions of the empire. The Grand Apartment is 60 feet square, imitating the number of alterations of the principle Yin. There are 12 halls 堂, imitating the 12 months; 36 doors, imitating the number of alternations of Chi-yin 極陰; and 72 windows, imitating the number of days in which each of the Five

"Its palace apartments in their forms took those of Heaven and Earth; in their cardinal axes corresponded to the principles Yin and Yang; were based on the true positions of the supernatural forces of Earth; and followed the round and square forms of the palaces of the stars."

In the preface to the *fu* of the Ling-kuang hall in Lu, again, the author attributes the preservation of the building for some three centuries, in the midst of general destruction, to the fact that "its plan and execution agreed with the patterns of the stars"

All of this theory and practise was completely opposed to Japanese ways of thought. The Japanese race is generally deficient in the talent for abstract thinking which has been so conspicuous in China; even Nature in Japan offers no stimulus to any sort of imaginative reaction comparable to the Chinese. In the narrow world which held the civilization of early Japan—the long valleys stretching from Kyōto to the Southeast—there is nothing which is not small and visibly bounded, completely a part of everyday experience. The mountains are hardly more than dignified hills, to be climbed in perfect safety in an hour or so; their long, swelling contours express a kind of gentle peace instead of any suggestion of fear, a softness made even more marked by their heavy mantles of forest. The climate lacks the savage extremes of China, and plentiful water produces an almost jungle luxuriance of vegetation. The earthquakes always possible under the smiling surface are terrible only at long intervals in any one locality, so that their memory is no more than a passing shadow. Here is a world brought down to human scale, an intimate and harmonious part of everyday human activity. It is a world which the Japanese in their earliest poetry spoke of as "beautiful" and "beloved," using the metaphors of a lover addressing his mistress;²³ in which the earliest Japanese heroes were victors over other men, not over the forces of Nature; and in which the descendants of the first Yamato conquerors lived for centuries without ever conceiving a civilization alien in any way to the simplicity of their existence close to the fertile earth.

In such a land of gentle, appealing beauty, peopled by a race as direct and unreflecting as the Japanese, architecture from the start was conditioned by factors diametrically opposite to those which governed in China. The Japanese had no desire to make his architectural environment a protest or reaction against the qualities of Nature. His whole instinct was to design and build in conformity to the natural world, to produce an architecture as closely bound to its setting as the Japanese himself was bound to Nature in his daily life. These conceptions may be traced throughout Japanese history, struggling with varying success against the imported Chinese ideal of the abstract and artificial. They

Elements is in force (yearly) . . . " etc. Much of this is doubtless pure imagination run wild; but at least the attempt to symbolize Earth and Heaven by a combination of square and round forms seems to have been a standard feature of the Ming-t'ang from Han down, to judge from the records assembled from different dynasties by the *T'u Shu Chi Ch'eng*.

²³ Cf. translations of the early poem anthology *Manyōshū* 萬葉集 by J. L. Pierson, Leyden, 1929. Especially vol. 1, pp. 77-8, 98, 99, etc. Also *Nihon-shoki*, 31st of Jimmu-tennō, p. 93: "The Imperial palanquin made a circuit, in the course of which the Emperor ascended the hill called Waki-kami-no-hotsuma. Here, having viewed the shape of the land on all sides, he said, 'Oh, what a beautiful country we have become possessed of!'" (Aston, i, p. 134).

have always dominated, of course, in domestic architecture, where the imported standards naturally met with the most persistent opposition. All remaining evidence of Japanese domestic architecture—going back 500 years or so in actual monuments, and much farther in pictorial and literary sources—conforms to this way of thinking. The building is designed to blend into its natural surroundings even more perfectly than an English cottage. All of its materials suggest the vegetable world which forms its setting; the roof is shingled or thatched, posts are of wood, the floors are wooden or covered with straw mats, the partitions are of paper and wood strips. All is left unpainted, in its natural color. Materials alone thus set a keynote of contrast with the Chinese style, always brightly painted and crowned by an aggressively artificial tiled roof. Interior design is no less bound to the environment than the exterior. The room is not an isolated space unit, but opens all along one or two sides to suggest the closest possible relationship with the garden outside; it seems almost an extension indoors of the world of Nature. Here again is a striking contrast to the typical Chinese interior, closed in by thick masonry with small windows, floored with tile, and framed by painted wood. There is nothing approaching formal design in buildings of this character. The various elements are grouped in as varied and unexpected ways as the forms of Nature. Axes are deliberately avoided, and symmetry is unimaginable.

This far-reaching opposition between two national modes of thought became an acute problem in Japan in the Asuka period, with the entry of Chinese building practise as an element inseparable from the Buddhist religion. From the seventh century on, there has no longer been a Japanese architecture, in the sense that there has been a Chinese or even a Korean on the mainland. Instead, the constructive energies of the nation have supported two styles, entirely alien to each other in their bases and in constant conflict. The balance between the two has shifted first to one side and then to the other. In the seventh and eighth centuries, under the strong stimulus of Imperial T'ang achievement, a passionate admiration for everything Chinese carried the architectural ideals of the continent temporarily to supremacy. Chinese methods of planning, construction, and decoration were used on a scale of unprecedented size and splendor in the great monasteries erected around the new capital, Nara. Under the devout Emperor Shōmu (724-749), they were carried to all the settled regions of Japan by decrees of 740 and 741, ordering every province to erect a monastery with a seven-storeyed pagoda, and a separate nunnery.³⁴ The fashion which at the outset had been associated entirely with the Buddhist church, soon was extended to other uses, as the Japanese came to find the secular civilization of China no less impressive than its faith. The Taika reforms which made over the whole administrative system of the kingdom after Chinese models, were duly reflected in architecture; thus the capital at Naniwa in which the new system was first put into effect at the middle of the seventh century, was laid out for the first time on the gridiron plan of a continental metropolis, with large and small avenues running in the cardinal directions, and a palace enclosure at the north end of the central axis.³⁵ The palace also was remodelled to include a great courtyard and Hall of State, the Daigokuden 大極殿, and quarters for the "Hundred

³⁴ See under Kokubunji 國分寺 in the historical dictionary *Kokushi-daijiten*, Tōkyō, 1936; or in the Buddhist dictionary *Bukkyō-daijiten* 佛教大辭典, edited by Mochizuki 望月, Tōkyō, 1931-7.

³⁵ Cf. Kita 喜田 in "Fujiwarakyō no Kenkyū 藤原京の研究, *Yumedono* 夢殿 xv, Nara, 1936, p. 65.

Bureaux" of Chinese tradition; these were naturally erected in the continental style, with tiled roofs and massive supporting members painted red. The subsequent capitals of the latter seventh century were progressively more and more ambitious. A first climax was reached at Heijō, or Nara, the seat of the throne throughout the eighth century; then as a culminating effort, even this was surpassed in the final Imperial transfer which created Heian, or Kyōto, a gridiron city some three by three and one-half miles in area. The palace enclosure here was about three-quarters of a mile (east to west) by four-fifths; a compound larger than the Forbidden City of Peking today (although here again the comparison is unequal, since the Heian Daidairi 大内裏 included the administrative quarters which are scattered through an outer enclosure in Peking). The Heian Hall of State, a building in full T'ang style, was about 170 by 50 feet (fig. 74);²⁰ almost as long as the principal T'ai-ho-tien of the Forbidden City (fig. 4), that is, although much narrower. As a final sign of the overwhelming sweep of Chinese influence over the culture of the seventh and eighth centuries, the imported building fashion invaded even the immemorial traditions of Shintō, adding elements of sophistication even to the Ise shrines. Newer and less conservative Shintō deities were still more amenable to persuasion; in particular, the god of war, Hachiman, permitted himself to be closely associated with Buddhism, so that his precincts in the eighth century might include even a pagoda.

Singularly unoriginal as they have shown themselves to be, the Japanese throughout their history have possessed—as if in compensation—strong and persistent ideas as to the forms which their cultural life should take. They have been capable of periods of passionate enthusiasm for novelty, and in these brief fevers have set aside for the time being all their preconceived standards of judgment, copying the new and fashionable with unique success and ingenuity. In the long periods of sobriety between, on the other hand, they have always re-judged their borrowings, discarding the features which had proved to be incompatible with permanent national tastes, and making over the others into a product no longer Chinese or Korean, but truly Japanese. In architecture, the permanent bases of opposition to the Chinese style were merely covered over for a time by Nara ambition. At the height of imitative excitement in the eighth century, the conversion of taste seems to have been by no means complete. In the twentieth century, the Japanese who has worked all day in western clothes in a reinforced concrete office building, goes home by preference to a house of traditional form, to an orthodox, old-fashioned wife, and to the comfort of his kimono. In ancient Nara as well, the hard, bright artificiality of the Chinese fashion must have been too unfamiliar and uncomfortable to win more than partial acceptance. Its proper places were the Buddhist temple, and the palace which housed an official hierarchy organized by Chinese ranks and titles. Private life must have always retained the possibility of a retirement into easier surroundings. A report of the Council of State, issued in 724, illustrates this reluctance to extend the new style into domestic architecture:

"The capital, in which Emperor and princes make their residences and whither the myriad regions come to pay court, lacks that majesty and splendor which should

²⁰ Cf. R. A. B. Ponsonby Fane, *Kyōto, Its History and Vicissitudes since its Foundation in 792 to 1868*, Hong-kong, 1931, p. 37.

display its virtue abroad. There are plank-roofed houses and thatched dwellings, survivals from the forms of antiquity, which are difficult to build and are easily destroyed, and in which the resources of the people are wasted. We therefore humbly beg that there may be issued a decree, ordering that all of the Fifth Rank and above, and also all persons able to undertake such constructions, should erect tiled dwellings and paint them with red and white."³⁷

In the succeeding Heian period, the waning of Chinese prestige with the collapse of the T'ang empire, and the eventual abandonment at the end of the ninth century of any formal intercourse with China, permitted the natural reaction to develop without hindrance. In three centuries of almost complete isolation, the Japanese remade their hybrid culture into a truly national one, unmistakable in all its forms. In architecture, the return to normal standards of preference once more widened the gap between the two national styles. Political conservatism retained the T'ang forms of the Nara period in the public sections of the Imperial palace, for their connotations of power and magnificence. Religious conservatism seems to have had a similar effect in preserving at least the axial and symmetrical ground plans of the eighth century in the monasteries immediately around Kyōto. In domestic architecture, however, the swing away from the red and white tiled dwellings of Nara must have meant an almost complete reversion to purely Japanese taste. The typical Heian mansion—the so-called *Shinden-zukuri* 寝殿造 form, symmetrically disposed in front of a garden lake—was Chinese in its balanced plan design, but in nothing else (fig. 79). The appeal of the domestic style thus formulated, with its natural, unpainted materials and its scale of comfortable intimacy, was strong enough to invade even the palace and the temple. Only the ceremonial sections of the Imperial residence of Heian were in Chinese style; the living quarters were Japanese, as old picture-scrolls show (fig. 99). We shall see later that in religious architecture one of the principal developments of the period was an increasingly marked modification of the classic T'ang formulae through the influence of domestic building habits.

At the end of the twelfth century and in the thirteenth, at a time of renewed contact with the continent and of fresh enthusiasm for the fashions which now were of the Sung, Buddhism imported two new styles from China. The effect of these, although great enough to modify the course of subsequent religious architecture in Japan, was by no means so epoch-making as first acquaintance had been in the Asuka period. The Japanese were no longer naive; experience, and the possession of a major architecture of their own, had given them a much greater ability to select and modify than before. One style, misnamed the "Indian," *Tenjikuyō* 天竺様, proved to have little more than novelty to recommend it to Japanese taste, and hence was abandoned almost entirely after a generation. The other, the "Chinese" style, *Karayō* 唐様, was more in keeping with native preference and at the same time had the backing of a new sect which was to occupy a dominant position in Japanese religion for centuries, the meditative school of Zen. Its continuance was thus assured, within Zen monasteries of any date. Outside of Zen, its

³⁷ Quoted by Hattori 服部, *Nihon-kenchikushi*, Tōkyō, 1933 (in the series *Kokushi-kōza* 國史講座, p. 246).

influence on the architecture of other Buddhist sects was almost entirely confined to matters of decoration. A temple hall of the eighth century had been as completely and consistently Chinese as its builders had been able to make it. An analogous hall of the fourteenth or of any succeeding century, outside of the single sect tied closely to Chinese practises, was, at the most, *Karayō* only in bracket, pillar, and beam details; general design as we shall see followed the lines of evolution which had been formulated in the Heian period, and which continued thereafter without being affected in any degree by the new fashions. Domestic architecture this time was almost entirely indifferent to new Chinese influence, while it moved toward the complete abandonment of all traces of the old; in the Kamakura period, the symmetry of the *Shinden-zukuri* broke down, and the whole mansion and garden style was eventually replaced by a grimmer fashion developed from the necessities of feudal warfare.

Into this pattern of confusion, Japanese architecture hardened at the end of the Kamakura period; and hardened so effectively that no further Chinese influence was more than trivial thereafter. In succeeding centuries, domestic building practise has remained the greatest stronghold of purely national tastes. Buddhist architecture has reflected every shade of compromise between the two ideals; an almost complete adherence to the south Chinese fashions of the thirteenth century in certain Zen monasteries; a more or less debased imitation of T'ang formulae in buildings reerected on the sites of ancient originals; halls in which the details of the *Karayō*, the *Tenjikyō*, the T'ang style as modified by later Japanese use, or even perhaps touches of late Ming, may be combined in perfect eclectic good-will; and on the other extreme, buildings erected for worship which are merely large houses, with all the simplicity and picturesqueness of the domestic tradition. Shintō architecture has suffered from the long period during which the native religion itself was subservient to Buddhism, and in which its buildings, therefore, were inappropriately bedecked with borrowed details. The scale of the Shintō sanctuary has remained that of the aboriginal forest hut, into which none but the custodian might enter; providing, in the midst of its modern finery, a last element of confusion and diversity in architectural practise.

CHAPTER I: THE ASUKA AND NARA PERIODS

ARCHITECTURAL REMAINS

SEVENTH CENTURY:

- Hōkiji 法起寺: Nara-ken, Ikoma-gun, Tomisato-mura 富郷村:
Pagoda, three-storeyed
Hōrinji 法輪寺: same village:
Pagoda, three-storeyed
Hōryūji 法隆寺: Nara-ken, Ikoma-gun, Hōryūji-mura:
Cloisters, Hōrō 歩廊 (front half)
"Golden" hall, Kondō 金堂
Middle gate, Chūmon 中門
Pagoda, five-storeyed

EIGHTH CENTURY:

- Eizanji 榮山寺: Nara-ken, Uchi-gun, Uchi-mura:
Octagonal hall, Hakkakuendō 八角圓堂
Gokurakuin 極樂院: Nara, Chūin-machi:
Miniature pagoda, five-storeyed
Hōryūji:
East gate, Tōdaimon 東大門
Refectory, Jikidō 食堂 and Saiden 細殿
Sūtra repository, Kyōzō 經藏
Hōryūji Eastern Precinct, Tōin 東院:
Dembōdō 傳法堂
Yumedono 夢殿
Kairyūōji 海龍王寺: Nara, Hokkeji-machi:
Miniature pagoda, five-storeyed
Western "golden" hall, Saikondō 西金堂
Shinyakushiji 新薬師寺: Nara, Takahata-machi:
Main hall, Hondō 本堂
Taimadera 當麻寺: Nara-ken, Kitakatsuragi-gun, Taima-mura:
Eastern pagoda, three-storeyed
Western pagoda, three-storeyed
Tōdaiji 東大寺: Nara, Zōshi-machi:
Hokkedō 法華堂 or Sangatsudō 三月堂 (rear half).
Hokkedō sūtra repository 經庫
Kangakuin sūtra repository 勸學院經庫

Shōsōin storehouse 正倉院校倉
 Tengaimon 轉害門 gate
 Tōshōdaiji 唐招提寺: Nara-ken, Ikoma-gun, Miato-mura 都跡村:
 "Golden" hall
 Lecture hall, Kōdō 講堂
 Sūtra repository
 Treasury, Hōzō 寶藏
 Yakushiji 藥師寺; same village:
 Pagoda, three-storeyed

GENERAL MONASTERY PLAN

THE ASUKA PERIOD (593-644):

Excellent evidence has been preserved in Japan of the layout of the earliest monasteries, founded under the patronage of Prince Shōtoku and of the Soga clan. In the case of Hōryūji, first brought to completion in 607, the majority of important buildings remain substantially intact, either from that date or from a rebuilding at some time within the century (fig. 5).²⁸ Shitennōji, erected on its present site in 592 and one of the two first fully equipped monasteries in the country, has clearly preserved the general plan of this foundation, although its original architecture has long since disappeared (fig. 11).²⁹ In addition, the ruins of several other establishments of the same period exist in more or less decipherable form.

The sum of evidence collected from these various sources indicates that the Japanese monastery of the Asuka period was laid out symmetrically, facing south, about a north-and-south axis (figs. 10, 11). Its nucleus was a group of buildings held together by a four-sided "cloister" corridor, the Hōrō, walled in on the exterior but an open colonnade within. Entrance to the oblong courtyard was gained on the south through an axially placed middle gate, Chūmon (fig. 6). Within stood the two buildings of primary importance in the whole scheme, a pagoda, Tō, and a Buddha hall or Kondō (literally, "golden" hall). These four elements remain in the present Hōryūji, and exhibit a homogeneous style which must certainly be that of the earlier seventh century period loosely termed "Asuka" (fig. 5).

In addition, the typical monastery must have included other buildings which at Hōryūji have been rebuilt at various periods as a result of fires. Most certain is the large hall whose orthodox position has been kept at Shitennōji, intercepting the rear corridor on axis to form the northern boundary of the courtyard (fig. 9). It seems to me possible that in the earliest monastery scheme, this site was made to serve more than one function involving a general attendance by the monks; specifically, that it was used both for the exposition and discussion of the Buddhist scriptures, and for the general maigre feasts

²⁸ Discussion of the dating of Hōryūji will be found, for reasons of space, in Appendix i, a.

²⁹ See above, p. 3 and note 7.

which formed an important part of early Buddhist ceremony.³³ As the monastery grew and its buildings became increasingly specialized, the rear hall was standardized as a Kōdō or lecture hall, and a separate refectory, Jikidō, was provided elsewhere.

The Hōryūji Kōdō was moved from its original position some distance to the rear, after a fire in 925 which destroyed the northern part of the monastic complex.⁴⁰ As a result of this change, the general plan has departed at the rear from its Asuka form (fig. 10, b, c).

An inventory of Hōryūji properties made in 747⁴¹ lists two smaller edifices which are commonly believed to have formed part of the original foundation, since their functions—housing the temple *sūtra* collection and the temple bell—were necessary in a well-appointed monastery. These at the outset must have stood outside the cloister to the north, symmetrically placed with almost the width of the courtyard between them; the *sūtras* in the Kyōzō on the west (fig. 7) and the bell in the identical Shōrō 鐘樓 on the east. In the tenth century alteration of the general plan, the newly extended corridors joined them to the courtyard area.

Other essential buildings served the physical needs of the monks. Of these the most important from a ceremonial standpoint was the dining hall, Jikidō, since the very act of eating, under proper conditions, was a primary act of worship. In the eighth century, for which our knowledge of Japanese monasteries is more precise, the refectory was a building as large as the lecture hall and next to it in rank. Its position in the general plan was less securely fixed; as I have suggested above, it may be that this element became independent only after a century or so of fusion with the lecture hall, and so had to be fitted into the complex as an afterthought. One solution—undatable—was to set it on the main axis behind the Kōdō, making a sequence of three major halls devoted to the Three Buddhist Treasures, Buddha, Law, and Brotherhood. At Shitennōji the existing Jikidō is on axis, but well to the rear with a large lotus pool and a secondary Buddha hall between it and the Kōdō; I know no evidence whether or not this was its original site (fig. 11). In the case of the eighth century Gangōji 元興寺 in Nara, a Muromachi period description speaks of the refectory as being north of the lecture hall;⁴² the same scheme may have existed

⁴⁰ A Kamakura period life of Prince Shōtoku, the *Kokon-mokurokushō* 古今目錄抄 (reprinted in the anthology *Dainihon-bukkyō-zenshō*, cxii, Tōkyō, 1931; refer to p. 103), in telling of this fire and the alteration which followed it, makes the temple superintendent of the period say that it was his desire to protect the buildings erected by the "holy one" 聖人 from any further disaster which might befall "the erections of common men" like himself, which prompted him to shift the new lecture hall to the north. It is said that this shows a belief at Hōryūji in the 10th century that the monastery possessed the original buildings set up by Shōtoku in 607, rather than later reconstructions. The quotation is doubly suspect, however; first because there is no proof that the reason given was anything more than an invention by the Kamakura author of the biography; and second, because the wholly impossible multitude of temples which pretend to have been founded by the prince shows a strong desire to benefit by his prestige.

⁴¹ In the anthology *Zoku-gunshoruijū* 續群書類從, *Shakkabu* 釋家部, xxvii/2, pp. 156 ff. History and text discussed by Fukuyama 福山 in "Hōryūji no Shomondai," *Yumedono*, xii, pp. 60 ff.

⁴² From the *Nanto-shichidaiji-junreiki* 南都七大寺巡禮記: in the anthology *Dainihon-bukkyō-zenshō* 大日本佛教全書, *Jishi-sōsho* 寺誌叢書, iv, pp. 9 ff. Adachi 足立 claims the same plan for Yakushiji and Tōshōdaiji without citing evidence; cf. his "Nanto-rokushūjin no Kenchiku" in *Bukkyō-kokogaku-kōza* 佛教考古學講座, xii, Tōkyō, 1937, pp. 25, 77-8.

from an early date at Yakushiji (fig. 13) and Tōshōdaiji, and its Chinese prototype may be inferred from at least one description of a T'ang monastery.⁴³ The alternative solution, more popular in the eighth century, was to provide a special refectory unit some distance to the east of the main compound; the position of the existing, Nara period refectory at Hōryūji (figs. 8, 10).⁴⁴

Sleeping quarters for the monks must have existed from the outset, but their form and position are not certain until the eighth century. By that time the standard plan provided a large U-shaped block of dormitories on axis at the rear. The eastern and western wings of such a "U" remain at Hōryūji (from a considerably later date), on either side of the cloisters; and it is known that the present lecture hall occupies the site of the old north wing, burned in 925.⁴⁵ The original Hōryūji, much smaller than later establishments, may have needed only the northern block to house its monks, the other wings being added some time after to provide for a subsequent expansion.

One final building which may have been a part of the most complete Asuka monasteries is the great south gate, Nandaimon 南大門. In later work this is habitually the southern terminus of the grand axis, and an entrance through the outer enceinte wall. In the case of Hōryūji, such a gateway seems to have existed at least by the eighth century (although the present building is Muromachi). The 747 inventory lists two "Buddha gates," one of which—described as containing "Kongō-rikishi" 金剛力士, i. e. the statues of the two wrathful Protectors of the Law—was certainly the middle gate. The other can hardly have been anything of less importance than a Nandaimon. The monastery precincts were entered from other directions by smaller, less pretentious gateways, one of which—the great east gate, Tōdaimon—survives at Hōryūji from the Nara period.

Within the typical seventh century layout reconstructed above, there existed two sharply defined subdivisions, disagreeing as to the relative positions within the main courtyard of the pagoda and the "golden" hall. One is typified by the plan of the Shitennōji nucleus, where the two stand on the grand axis with the pagoda in front and the courtyard is therefore elongated in the axial sense (fig. 11). In the other subdivision, exemplified by Hōryūji, they stand instead side by side flanking the axis, pagoda on the west, Kondō on the east; and the cloisters are thus pulled out to an oblong in the east-and-west sense (fig. 10).

Other seventh century establishments, shrunken or long since abandoned (but identifiable in plan through their stone column bases and platforms), follow one or the other of the two schemes. The Hōryūji formula is that of Hōrinji⁴⁶ and Hōkiji,⁴⁷ smaller temples in the same neighborhood (the last reversing the position of hall and pagoda); of Nonakadera 野中寺 in Ōsaka-fu;⁴⁸ of an unidentified ruin in the same prefecture inside the precincts of a tutelary shrine, at Azadōyama, Kokubuntanabe, Minami-kawachi-gun 國分

⁴³ See Appendix I, b.

⁴⁴ See Appendix I, c.

⁴⁵ Temple tradition makes this one of the 46 establishments founded by Shōtoku-taishi. The enshrined image of Miroku is dated 丙寅, which from its style must indicate the year 666 rather than any other cycle (reproduced in *Zōzō-meiki* 造像銘記, Tōkyō, 1936, p. 9). Some authorities believe that the temple must have been built at this same period, rather than in Shōtoku's time. Many tile heads of Asuka style have been found.

田邊字堂山; of Jōrinji 定林寺 in Nara-ken;⁴⁶ and of Kanzeonji 觀世音寺 in Tsukushi (later and transitional to the Nara type).⁴⁷ The Shitennōji scheme was that of the Soga clan's other monastery, Hōkōji in Nara-ken, according to an eleventh century view of the precincts;⁴⁸ and of a third Soga foundation, Yamadadera 山田寺 in the same department (later, and with transitional elements).⁴⁹ The examples in which one or the other arrangement can be identified today are only a fraction of the 46 odd establishments traditionally listed as belonging to the Asuka period. It may be worth notice, however, that the presumably earlier type of Shitennōji—at least according to this partial evidence—was less popular in following generations than the (presumably) later one of Hōryūji.

An approximate idea of the scale and equipment of a first-class monastery of the Asuka period may be gained from the Hōryūji inventory of 747, the *Hōryūji-engi-shizaichō* 緣起資財帳 (realizing always that the list may contain elements not present in the previous century).⁵¹ Measurements are given in the official foot of the Tempyō period (729-48), equivalent to 0.975 modern carpenter's *shaku* 曲尺, and thus to about 11.6 English inches.

"Area of whole monastery site: four sides, each 1000.

"Gateways, five.

⁴⁶ A tradition at least as old as the 10th century *Shōtoku-taishi-denreki* 聖德太子傳曆 lists this among the "great temples" founded by Prince Shōtoku; Asuka style tiles have been found.

⁴⁷ *Shoku-nihongi* 續日本記 for Wadō 2/2 (709): "Kanzeonji in Tsukushi was erected by Emperor Tenchi (661-70) to pray for Empress Saimei (who died in Tsukushi in 661). Though years have passed, it is not yet completed." The entry concludes with an Imperial command that it be finished. Original column-bases of pagoda, Kondō, and Kōdō remain; there are no traces of the cloisters, but their position is shown in old pictures (cf. Hattori, *N-kenchikushi*, fig. p. 172). The placing of Kondō and pagoda, to west and east respectively, is like that of Hōkōji. The foot measure used was apparently that of Tang, marking a further change from the Hōryūji standard. A temple inventory of 901 has been preserved, the *Engi-gonen Kanzeonji-shizaichō* 延喜五年觀世音寺資財帳: in *Dainihon-bukkyō-zensho*, *Jishi-sōsho*, i, pp. 131-67.

⁴⁸ See above, p. 3. A view of Hōkōji appears in the pictorial life of Prince Shōtoku, done by Hata Chishin 秦致真 in 1069, which formerly covered the walls of the Edono 繪殿 of Hōryūji, and today exists as a set of screens in Imperial possession. Cf. Minamoto, "The Pictorial History of Prince Shōtoku" (in Japanese), *Bukkyō Bijitsu* 佛教美術, xviii, Dec., 1931.

⁴⁹ *N-shoki*, Kōtoku-tennō 5/3/24 (649), p. 447, telling the circumstances of the disgrace of the Great Minister Soga Kurayamada no Ishikawa-marō, speaks of his eldest son Kōshi 興志 as building "the temple" at Yamada, and says that he committed suicide in front of the open door of the Buddha hall. The establishment is supposed to have been begun by a vow of the Soga—either by Iruka or his father Emishi—in 641 (these being respectively first and second cousins to the Great Minister). Its plan, being linked to those of Shitennōji and Hōkōji, perhaps represents a tradition of building under Soga patronage, which may have been deliberately maintained in contrast to the Hōryūji design sponsored by Prince Shōtoku.

For the reconstructed general plan, see Hattori, *op. cit.*, fig. p. 141. Courtyard proportions should be contrasted to those of Shitennōji, fig. 11. The lecture hall has been pushed to the rear, giving it a marked separation from the "golden" hall. This is a peculiarity of courtyard designs in the following, "proto-Nara" period (see below, p. 48 and fig. 12), and seems the beginning of a transition to the final, 8th century form in which the lecture hall is entirely outside the courtyard area, to the rear (see below, p. 49 and figs. 14, 15). The "Tang" foot seems to have been used.

Of the two Buddha gateways, one is provided with Kongō-rikishi Protectors. One 42 by 29; one 38 by 19.⁵⁰

Priests' gateways, three. One 24.8 by 10; one 30 by 17; one 30.5 by 16.

"Pagoda, one. Five storeys, height 160.⁵¹

"Halls, two.

One 'golden' hall, two-storeyed, 47.5 by 36.5; pillar height 12.6.⁵²

One refectory, 102 by 57.⁵³

⁵⁰ The first set of dimensions must indicate the present middle gate. Modern calculations, using the "Tang" foot, give the latter dimensions, between column axes, of 40.08 by 28.48.

⁵¹ From platform floor to spire tip, the pagoda's actual height is about 108 "Tang" feet. The "160" is probably a symbolic multiple of the 16 feet which was the conventional height for a Buddha image.

⁵² Modern calculations, in the "Tang" foot, give 47.07 by 36.29. For these comparisons, see Aizu, *op. cit.*, pp. 263 ff.

⁵³ That "refectory" was written here by a copyist's careless error for "lecture hall," is accepted by Hattori, *op. cit.*, p. 276, and in general by the majority of critics. Kita disagrees, since his theory of an 8th century rebuilding of Hōryūji (see App. I, a) is aided by supposing that the lecture hall had not yet been completed by 747, and so was not listed. The problem is a complicated one. The dimensions recorded in the inventory may or may not give a clue. The existing Hōryūji lecture hall, on the new site adopted at the time of its erection in the later 10th century, has been modified by repairs since that date. Study of details and measurements makes it clear that one whole bay of length has been added on the west; and that the 10th century hall must have been, therefore, eight bays long by four deep (instead of nine by four, its present form). The dimensions of the apparently original portion are in modern *shaku* 98.88 by 54.3; or in the "Tang" foot, 101.4 by 55.7. This is sufficiently close to the 102 by 57 of the inventory to suggest that the 10th century lecture hall was set up with the same measurements as its destroyed predecessor; and that that predecessor must have been the building listed in the inventory. On the other hand, the inventory of the Nara monastery Daianji (the one other survivor from 747, when such documents were prepared by all large establishments) lists "golden" hall, lecture hall, and refectory in succession as three major buildings, and gives approximately the same dimensions for the last two (cf. note 93 below). Thus a mere similarity of measurements is no clear proof which building it was that existed at Hōryūji in 747.

If the "refectory" listed was really a lecture hall, did the monastery have no dining hall in 747? The present refectory complex, to the north-east of the main courtyard, is manifestly in 8th century style. It is composed of two buildings close together, the dining hall proper, Jikidō, to the north and a smaller Saiden in front and parallel. The dimensions of the two tally almost exactly with those of the two "administration buildings" 政屋 given further down the Hōryūji list. If they are the same two, and were used for administrative purposes in 747, there must have been another refectory somewhere in the monastery; and it seems less reasonable to assume that the inventory omits one whole entry by oversight (or even that no dining hall existed) than to admit that it was written correctly, and that the less essential lecture hall was lacking. It seems to me most likely that the inventory should be taken as it stands, and that the large building at the rear of the "golden" hall was really a sort of combination refectory and lecture hall. The two functions could be carried out in any hall of large size, and the Daianji inventory shows that their space requirements might be approximately the same. An eating place was not only a physical necessity, but in early Far Eastern Buddhism was a building of considerable importance because of the emphasis placed on the maigre feast, or *Sai-e* 齋會, as a religious act. So far as I know, there is nothing like contemporary evidence to prove that the earliest monasteries in Japan were equipped with both refectories and lecture halls. I have not found the term for the latter, Kōdō, in 7th century Japanese texts, and as for China, the fairly comprehensive evidence available for the north Chinese capital, Lo-yang, in the 6th, shows that lecture halls were by no means universal in the monasteries there (see below, p. 38). Perhaps the building at the back of the early monastery courtyard was first considered a refectory, which might

- "Lanterns, two. Height of each, 11.5.
- "Cloister corridor, one circuit. Length 308, breadth 206.
- "Two-storeyed pavilions, two.
 - One *sūtra* pavilion, 31 by 18.
 - One bell pavilion, 31 by 18.
- "Priests' dormitories, four. One 175 by 38; one 181 by 38; one 155 by 32; one 106 by 38.
- "Bath-house, one, 78 by 33.
- "Buildings for the brotherhood, ten.
 - Two kitchens. One 150 by 42; one 94 by 20.
 - One oven house, 95 by 43.
 - Two administrative buildings.⁵³ One 70 by 32; one 68 by 18.
(The above all roofed with tiles.)
 - One grain-hulling building, 68 by 24.
 - One rice storehouse, 81 by 25.
 - One wood-shed, 52 by 20.
 - Two guest-houses. One 47 by 15; one 62 by 18.
(The above roofed with cypress bark shingles.)
- "Seven storehouses. Four roofed with tiles, among which two are paired, one is an earth storehouse, and one is metal-sheathed. Three others are thatch roofed."

Two salient characteristics of this establishment should be noticed. One is its sim-

also accommodate periodic exposition of the *sūtra*; and only later, in more complicated layouts providing for a more elaborate ceremonial, was used as a *Kōdō* (with the *Jikidō* set behind it, as at Gangōji, or to the north-east, as at Kōfukuji and Tōdaiji). In China, again, at the middle of the 9th century, the Japanese pilgrim Jikaku-daishi 慈覺大師 saw a great ceremony held in the Buddha hall of K'ai-yüan-ssü 開元寺 in Yang-chou; at the conclusion of the service, the participants proceeded to the "great hall" behind the Buddha hall, to partake of a maigre feast (*Dainihon-bukkyō-zensho*, *Yūhōden-sōsho* 遊方傳叢書, i. p. 182).

It remains an interesting problem whether more than a coincidence is involved in the fact that the present refectory complex at Hōryūji—which apparently served for administration in 747—should have the same general north-east position and twin-hall form as that of Kōfukuji or the more elaborate Tōdaiji, which must have been refectories from the start. Of course we know nothing about the "administrative buildings" except the fact that the dimensions given for them correspond to those of the present *Jikidō* and *Saiden*. Perhaps they stood in quite a different part of the precincts in 747, and in a different relation to each other; and when, after 747, it was decided to set up a new eating hall at the northeast, on the order of the great new Nara monasteries, they were moved to the desired sites (or even served only as convenient models for size in erecting new buildings).

The interesting study of Adachi—"Plusieurs questions quant à la chapelle de lecture dans Hōryūji" (in Japanese), *Tōyō-bizyutu* (i. e. *bijitsu*), xviii—draws a number of sweeping conclusions from evidence which seems to me not always convincing. He believes that the "refectory" listed in the inventory, with its dimensions of 102 by 57, cannot have been the original lecture hall. The latter, he says, must have been a building of eight bays by four, like its 10th century successor (and apparently like the *Kōdō* of its contemporary Shitennōji as well). Early Japanese habits of proportioning would have set the length and depth of such a hall in a ratio of 2 to 1, or thereabouts. The ratio given in the inventory is only about 1.8 to 1, which suggests instead seven bays by four. All of this, demonstrated in detail, is possible, but the proof seems to me far from conclusive.

plicity in comparison with later monastery types. The Hōryūji inventory is a fairly long list because it includes a large number of buildings of domestic and utilitarian character. As a place for worship of the Buddha, it contains only three buildings of religious purpose: the pagoda which houses His relic, the "golden" hall in which His image is worshipped, and the lecture hall in which His teachings are expounded. In comparison with later temples, in which the number of such halls was greatly increased to provide for the adoration of especially popular divinities, this shows a striking concentration, and indicates a faith still not very far advanced beyond the early simplicity of Hinayāna. The second characteristic is the prominence given in the scheme to the pagoda. Here again is a strong link with the past. The first Buddhist monasteries in India had for many centuries contained the *stūpa* as their central element and the one focus of their attention; the development of a building with an interior, to house a statue as a second object of worship, was a comparatively late phenomenon. The Shitennōji plan, with the pagoda as the first element inside the courtyard, clearly retains the traditional feeling for the preeminence of the relic over the icon in sanctity. The Hōryūji type, on the other hand, in advancing the Buddha hall to an emphasized parity of importance, marks a transition to later schemes in which the latter element becomes the focus; while the pagoda is relegated to a second place, or at last is abandoned entirely.

The researches made by Hasegawa 長谷川 and Hattori 服部 in the dimensions of the nuclear plans of Hōryūji and Shitennōji have indicated that these were laid out on a geometrical scheme of remarkable sophistication.⁵⁴ In both (and apparently also in the ruins of Hōkōji), short and long sides of the cloisters stand in the relation of one to the square root of two. At Shitennōji the original monastery precincts were apparently 1000 Asuka *shaku* square (fig. 11). This area was divided into 25 equal squares, 200 *shaku* on a side, one of which formed the short east-to-west dimension of the cloisters. The "golden" hall was placed within the courtyard at the intersection of 45 degree diagonals from the rear corners of the enclosure; i. e. at the center of an imaginary square of which one side was the rear of the cloisters. The pagoda in front was located by drawing each diagonal of the *whole* courtyard area, and intersecting it by the opposite diagonal of the front *half* of the courtyard; the two points thus found were joined, and the intersection of this line with the main north-and-south axis gave the pagoda center. In addition, an imaginary courtyard square was constructed of which one side was the front of the cloisters; and the intersection of each diagonal of this with the opposite diagonal of the whole courtyard area, located the east and west edges of the pagoda platform. The dimensions of all elements were in simple whole numbers.

A much more complicated adjustment was made necessary at Hōryūji by the method, there adopted, of setting pagoda and "golden" hall side by side (fig. 10). In the first place, the middle gate—perhaps with an idea of echoing this parallelism—was made four bays wide instead of the usual odd number, thus giving two entrance-ways flanked by corner bays holding the statues of Protectors. Since the two elements inside the courtyard were of different sizes, it was impossible to balance them by a mere symmetry about the central

⁵⁴ Hasegawa in *Kenchiku-zasshi* 建築雑事, no. 477, Dec. 1925; Hattori, *op. cit.*, pp. 72-3, 94-5.

axis. The greater area covered by the "golden" hall necessitated a shift of axis away from it, to the west. For this reason, both the middle gate and the lecture hall were placed not on the middle line of the courtyard, but one bay farther west. The large number of bays involved—in the case of the gateway, ten on the right and nine on the left—made it possible to accomplish this shift without offending the eye. Furthermore, the east-to-west axis of pagoda and "golden" hall was made to run not along the middle of the courtyard, but five *shaku* to the rear. To locate the north-and-south axes of the two, the courtyard was divided into two imaginary rectangles, each containing one building. The diagonals of these rectangles were made to intersect the opposite diagonals of the whole cloister area, and the north and south points thus gained were joined. In the case of the "golden" hall rectangle on the right, the northern point of intersection seems to have come at, or very close to, the head of the north stairway of the platform; while in the case of the pagoda rectangle, this point seems to be at the staircase foot. Here again all major dimensions were in simple whole or half feet, as calculated by the Asuka *shaku*.

Examination of the features of individual Asuka buildings, as seen today in the Hōryūji group and in the neighboring smaller pagodas of Hōrinji and Hōkiji, is deferred from this point for detailed analysis later. The general features of their appearance may be here briefly mentioned, in particular as they represent an imported architectural style radically different from the indigenous Japanese tradition of their time.

The whole monastery complex was laid out—at least in its major elements—with a strict symmetry or balance, facing south (fig. 5). All important buildings stood on platforms paved and faced with stone; in this alone they emphasized a solidity and permanence new to Japan, where even the Imperial palace had seldom remained in the same place for more than one reign. Their roofs were of hard, durable tile with ridge ornaments, in contrast to the native techniques of using cypress shingles, planks, or thatch. The greatly increased weight of such a covering entailed their use of a well developed bracketing system to support the overhanging eaves; from a visual standpoint, this gave them an elaboration very different from the light, simple, post-and-lintel method used in the early Shintō shrines. All exterior wooden members, finally, were painted a deep red lit by yellow on the cross-cut faces of brackets, rafters, etc., while the intervening surfaces were painted white. Pure Japanese taste has always preferred unpainted wood throughout. The interiors doubtless already presented the more elaborate decorative system seen still in buildings of the Nara period; and were further enriched by painted wooden canopies above the main images.

Middle gate and Buddha hall were provided with double roofs; the lecture hall (or refectory?) had one only. As to pagodas, those of Hōkiji and Hōrinji, remaining today, are three-storeyed; Hōryūji has one of five. Five storeys are recorded for Shitennōji,⁵⁵ and are shown in the eleventh century painting of Hōkōji.⁵⁶ Erections of this type were in keeping with the modest scale of the early monasteries. In 639 the temple of Kudara-no-ōtera 百濟大寺 was provided with a pagoda of nine storeys, a sign of transition to the far more extensive foundations of the next era.⁵⁶

⁵⁵ Shitennōji: an inventory purporting to represent the early temple is included in the 12th century *Fusō-ryakki* as being a quotation from its (now lost) "history," or *engi*, under Suikō-tennō 1st.

⁵⁶ *N-shōki*, Jōmei-tennō 11th, 7th and 12th month entries, p. 406; Aston, ii, p. 169.

CONTINENTAL ORIGINS:

The immediate source of Buddhist architecture in Japan, like that of the religion itself, lay in Korea, and particularly in that one of the Three Kingdoms which had for generations maintained the most friendly relations with Japan, Pekche (Jap. Kudara). As the first official encouragement to the practise of the new faith had come with the arrival of a mission from the king of that country in 552, bearing *sūtras* and an image, so the first temple architects—whose crossing is recorded, along with icon-makers and monks, in 577 and 587—were from Pekche. Later immigrants came also from the rival kingdom of Kokuli (Jap. Koma), and may well have contributed a somewhat different element to the growth of Japanese monastery architecture during the seventh century. In recognition of the other's priority in time and perhaps also in general influence, however, modern Japanese historians speak of the temples of the Asuka period as being of the "Kudara" style.

The problem of the character of this imported architecture in its own country is less directly and satisfactorily solved. With the exception of a number of masonry pagodas, the earliest remaining temple buildings in the Korean peninsula are many centuries later than Hōryūji in date. For the period corresponding to Asuka and for long after, there remain only long abandoned ruins, or traces half obscured by rebuilding, the most readily decipherable of which can give direct evidence only of ground plans and the comparatively minor arts of stone-cutting and tile-stamping. Even the geographical distribution of these remains is unsatisfactory for the purposes of drawing any close historical parallel with Japan. The great majority, and the best preserved, fall within the ancient kingdom of Silla (Jap. Shiragi), divided from Japan by a long-standing enmity and by far the least important of the three from the point of view of transmitted continental influence. In the case of Kokuli, although it was the first to be converted to Buddhism and records speak of temple building from the latter part of the fourth century on, not even the evidence of ruins exists today. The texts, mentioning only the names of the various monastic foundations as they were established, are of almost no use; except that the recurrence of temple names including the word "pagoda" indicate the importance of this feature in contemporary religious thought. In the case of Pekche, the records again are of little practical value, particularly since the temple most emphasized in them, the great Wanghungsa 王興寺, built in the royal capital between 601 and 635, and corresponding in reputation to Shitennōji and Hōryūji in Japan, has disappeared without a trace. The ruins of one monastery remain, however, and although difficult to reconstruct and of controversial date, are of great interest.

These are the remains of the temple of Mirūkssa 彌勒寺 (Jap. Mirokuji) in northern Zenra Province, Ekisan-gun.⁸⁷ Nothing stands on this site today except the lower part of one great stone pagoda, the largest in Korea; but traces of foundation mounds and column bases, together with the tradition recorded of the temple's origin, make possible its reconstruction as a unique ground plan. The tradition appears in two forms in different works,

⁸⁷ Detailed studies of the remains of this and other early Korean monasteries are given by Fujishima 藤島, "Chōsen Kenchiku Shiron," in *Kenchiku-zasshi*, xlv, no. 533. For Mirūkssa, see p. 1035; also the study by Sekino T., in his "Shiragi-jidai no kenchiku," *Kenchiku-zasshi*, no. 307. Quotation from the *Samgukyusa* is in iii, section on King Mu (Keijō edition, 1929, p. 35).

one clearly corrupted since it places the foundation prior to the introduction of Buddhism into Korea. The more persuasive version is given by the *Samgukyusa* 三國遺事 as an event in the reign of King Mu 武 (600-640). As the king and his consort were journeying to a temple, there appeared before them a Maitreya (Jap. Miroku) Trinity, rising from the midst of the lake. Awed, they vowed to erect a great monastery on the spot. By divine aid, the lake was turned into a level plain in one night; and thus the vow was fulfilled, taking the form of three precincts—each with halls, pagoda, and corridors—to correspond with the Three Assemblies to be held by Maitreya after His enlightenment. Completion of the great undertaking was aided by the despatch of 100 workmen from Silla, by the latter's monarch, Chinp'yong 眞平 (579-632).

Today, in spite of the almost complete disintegration of the temple, sufficient traces remain to prove at least the former existence of such a tripartite layout. East of the pagoda still standing is a square mound of the same size, indicating the site of another (probably wooden, from the lack of stone remains). At the same distance due north of each, are column bases still in sufficient alignment to show that they once supported halls, probably five bays wide by four deep. Other stones in these two precincts may be identified—on the basis of the axial scheme indicated by the pagodas and Buddha halls—as having belonged to lecture halls (or refectories?) at the rear, middle gates at the front, and surrounding colonnades. To the north, on axis between the two groups, are vestiges of a third complex on a larger scale. The front precincts on east and west are each quite close in size to the plan of Hōryūji. The whole monastery, then, including the main compound to the north, was at a scale far beyond anything attempted in Japan at the same period, and unparalleled elsewhere in Korea.

Some question exists as to the generation when this great establishment was achieved. The lack of any more sober historical reference than that given above, by the not always reliable *Samgukyusa*, is unfortunate. Dr. Sekino in his study of "Mirokuji," has abandoned this traditional origin in favor of a dating based on actual remains, the pagoda and tiles found around it; these compare so closely to known work of the last quarter of the seventh century as to suggest that the whole monastery must be shifted to a period 50 years or so later. This change would make it literally a work of Silla rather than Pekche, since the latter was conquered and absorbed by the former in 663. A certain terminus before which it must have been in existence is given by its mention in history in connection with an earthquake of the autumn of 719. On the other hand, it seems quite possible that the remaining pagoda was built at a considerable lapse of time after the original founding of the triple monastery. This is known to have been the case in the great royal temple of Hwangnyongsa 皇龍寺 in Silla, where no less than 79 years intervened between the recorded completion of the temple itself and that of the pagoda;⁸⁸ and such a delay is the more likely in the case of Mirūkssa since the great size of this pagoda must have necessitated a tremendous effort toward its erection. The tradition of origin is at least convincing in the fact that the two kings which it mentions were actually contemporaries; and it is

⁸⁸ Fujishima, *op. cit.*, pp. 278-97. Cf. *Samguksagi* 三國史記, Silla section, King Chinhung 14th and 27th; Queen Sondok 12th and 14th. Also *Samgukyusa*, section on the nine-storeyed pagoda of Hwangnyongsa (iii, pp. 21-2); section on the 16 foot icon (iii, p. 21).

the belief of Professor Fujishima that even if it must be discarded and the foundation delayed until the period of Silla's supremacy a generation or two later, the monastery must have been carried out within the long-established Pekche tradition.

An interesting complication in the relationships between the architectures of the three Korean kingdoms and that of Asuka Japan is provided by the dimensions of this temple. As we shall see below, ruins in the ancient Silla domain dating from the end of the sixth century and the first part of the seventh made use of a foot measure which was apparently that of the last of the northern Chinese dynasties, Eastern Wei and Northern Ch'i. This is so close to the *shaku* used in Hōryūji and Shitennōji as to suggest an ultimate derivation of the latter from north China, through Korea. It is likely that the official measure of Asuka was that of "Koma," or Kokuli, and it seems probable that it was through this country, adjacent to China, that the Wei and Ch'i standard was transmitted both to Silla and to Japan. Unfortunately it is as yet impossible to check this theory by remains in the Kokuli realm itself. In Silla from around the middle of the seventh century, and in Japan at least after the Taihō reforms of 701, the T'ang foot was used instead. The dimensions found in the Pekche temple of Mirūkssa check with neither of these standards; that is to say that these measurements, rendered in terms of either the Wei-Ch'i foot or the T'ang, by means of the conversion factors used elsewhere, do not give the series of simple whole numbers found in the Silla and Asuka buildings. It seems likely that some entirely different standard was used; and this raises the problem, still unsolved, why the early Japanese temples, built presumably by workmen from Pekche, should correspond not with this but with the foot of Silla and Kokuli. At least the fact that the T'ang measure is not employed at Mirūkssa is an argument against its foundation in the latter part of the seventh century, since the new scale seems to have been applied in the generally less advanced architecture of Silla as early as 634 in the temple of Punhwangsa 芬簞寺 in the environs of the old capital.

In all other aspects of planning, the fragmentary traces left at Mirūkssa may be satisfactorily filled out by the much better preserved temple ruins in Silla. Two of these in the former capital (modern Keishū) were unmistakably laid out in the same "Kudara" formula which was followed in the Asuka period, and which in Pekche itself is only just recognizable at Mirūkssa. The older, larger, and more readily decipherable of these is the site of Hwangnyongsa. According to the *Samguksagi*, this temple was founded by royal order in 553, in the reign of King Chinhung 眞興, and was "completed" in 566.³⁸ The completion seems to have been only comparative, since it was not until 584, under King Chinp'yong, that the "golden" hall was finished to enshrine a celebrated 16 foot image made ten years earlier. The famous nine-storeyed pagoda, 225 feet high, was not begun till 643, under Queen Sōndōk 善德; and then was attempted only after the services of an architect and 200 artisans had been secured from Pekche, the Silla court admitting its inability to carry out the work with native resources. The temple was burned to the ground in 1238, and thereafter was never restored.

The present state of its site shows clearly the earth mounds (with stone facing), and the pillar bases of "golden" hall and pagoda, the latter to the south in the axial "Kudara" scheme. Further remains are identifiable as the cloister colonnade, with middle gate, and

other gateways on east and west sides of the courtyard; and as a lecture hall. (This last may have existed at least by 613, when a formal exposition of the scriptures, with 100 priests present in canopied "high thrones," was held before the envoy from Sui. It may even have predated the "golden" hall, since some major building must have housed the main icon for the ten years before the latter's completion).

The "golden" hall seems to have been unusually large, nine bays across the front by four deep, and 126 feet by 56, in the Eastern Wei-Northern Ch'i measure. The whole cloister area was 336 feet east to west, by 448 deep. In the case of the obvious Japanese parallel, Shitennōji, these same dimensions—in an approximately equal standard *shaku*—are 46 by 38 (for a "golden" hall five bays by four), and 200 by 284. The bays of the Shitennōji Kondō are 8 feet wide at the corners, and 10 elsewhere. In that of Hwangnyongsa, the intercolumnar intervals were all apparently the same, 14 feet. Thus the scale of major elements was approximately half again as large as that of the Japanese counterpart. General proportioning of the courtyard and placing of elements, however, seem to have been very similar, and the two temples were probably laid out on the same geometrical system (with a slightly greater proportional cloister width in the Korean, made desirable by the greater length of its hall). As in Asuka examples, all major dimensions were in simple numbers.

To the north in the same neighborhood, the "Kudara" monastery layout appears again in the ruins of Punhwangsa. Here three storeys of a brick pagoda, originally of nine, still stand.⁵⁹ In front of the modern Buddha hall, two pillar bases, directly north from the pagoda, seem to mark the site of the former "golden" hall. Those of the lecture hall and middle gate have not yet been uncovered, so that the form of the courtyard cannot yet be determined. The existing remains seem to have been calculated on the basis of the T'ang foot; and are so far the earliest instance of its use, since the temple was founded in 634 under Queen Sōndōk, the later donatrix of the great Hwangnyongsa pagoda.

Two temple ruins of major importance in Silla and one in Pekche, dating from the period corresponding to Asuka in Japan, thus show the type of general plan there used at Shitennōji. There is no evidence remaining in Korea to show any use in that country of the temple layout found in Hōryūji and in the majority of developed Asuka monasteries. As we shall see in subsequent pages, no evidence for this type exists in China, or anywhere else except in Japan. The obvious inference has been drawn by Japanese scholars that it was a Japanese invention; and being found first at Hōryūji, must have originated there in the ideas of the great donor of that temple, Shōtoku-taishi, who for doctrinal reasons must have preferred to give equal importance in worship to the relic and the image, rather than setting the former first. So enthusiastic a proponent of this theory as Dr. Sekino has backed it up by a number of other features found in the details of Hōryūji architecture and unparalleled elsewhere, and has not hesitated to call the majority of these the inventions of the wise and devout Prince Shōtoku.⁶⁰ The lack of material evidence to the contrary makes the supposition impossible to disprove. I think it may be said, however, that in

⁵⁹ Fujishima, *op. cit.*, pp. 297-300, pl. v. *Samguk-sagi*, Silla, Queen Sōndok 3rd.

⁶⁰ Sekino T., "Origin and Characteristics of the Architecture of the Asuka Period" (in Japanese), *Bukkyō Bijutsu*, xiii, June 1929.

any place and time those of the first or second generation who propagate a religion newly imported into their country, rather than introducing any changes, are as scrupulous as possible in reproducing the orthodox forms transmitted to them. This must have been all the more generally true in the case of Buddhism, in which so severe an emphasis has been placed on the formal elements in iconography and ritual, and in which on first acquaintance it is so difficult to distinguish the trivial from the immensely important. If there had been any marked independence of thought and practise on the part of Japanese Buddhists in the generations following Shōtoku-taishi, it would be less difficult to credit him with the boldness required to criticize and discard. Until well after the Nara period, however, the Japanese were as sedulous as circumstances permitted in their dependence on imported modes and ideals. The little that is known of Korean monasteries especially in Pekche, in the period corresponding to Asuka, and the almost complete lack of any information about those in contemporary and earlier China, make the assertion that no parallels to Hōryūji exists a precarious one, likely at any time to be overthrown by the evidence of a single newly discovered site.

The source of Korean Buddhist architecture, as indeed of all advanced cultural forms in the peninsula, was Chinese. This obvious statement requires a qualification which may or may not be important. China, during the formative stages of Buddhist temple building in Korea and Japan, was passing through one of those apparently interminable periods of disunion which in recent years have provided so congenial and profitable a theme to Japanese political theorists. The two Korean kingdoms most directly responsible for the early advancement of Buddhism and its arts in Japan, reflected this duality to a marked degree in their contacts with the central continent. Kokuli had been first converted, in 372, by a missionary sent by land from the half-Tibetan Fu Chien, monarch of the mushroom northern empire of the Former Ch'in. Lying in the northern half of the peninsula, it shared frontiers in later centuries with the Northern Wei and the dynasties which succeeded this, and after the establishment of its capital at Pyong-yang paid tribute periodically to the northern court. This relationship is perhaps responsible for the fact that what in Japan was called the "Koma" foot measure seems to have been originally that used in Eastern Wei and Northern Ch'i. In the one extensive series of remains of Kokuli art, the tomb chambers with their painted and architectural decoration, a close similarity in details to the north Chinese style seen in the caves of Yün-kang, Lung-mên, and T'ien-lung-shan is obvious; and (since many of these same details are characteristic of Asuka) furnishes a very convenient halfway point between Japan and the continent (figs. 19, 56, 57).⁶¹ In the case of Pekche, on the other hand, the initial mission had come from the Eastern Chin in 384, well after the Chinese dynasty had been driven southward. Since this kingdom lay at the southwest tip of the peninsula, from which the southern Chinese ports were reached with considerable ease, its intercourse with the later dynasties of Sung, Ch'i, Liang, and Ch'ên was frequent. Either from preference, or because access

⁶¹ Cf. Hamada 濱田, "Hōryūji no kenchiku-yōshiki to Shina-rokuchō no kenchiku-yōshiki ni tsuite," in the Naitō anniversary series of Chinese studies; translated into Chinese by Liu Tun-tsêng, under the English title "A Comparison of the Architectural Forms of Hōryūji with those of the Han and Six Dynasties," *Bull. of Soc. for Research in Chinese Archit.*, iii/1, March 1932. See below, pp. 99, 100, 101, 103, 104 and note 174.

by land was blocked by its enemy, Kokuli, its relationships with the northern courts were much more distant. The king of "Kudara" who first transmitted Buddhism to Japan in 552, is recorded eleven years earlier as having sent a mission to the Liang at Nanking, bearing tribute and asking that he be sent someone versed in the Poetry Classic, an exposition of the *Nirvāṇa Sūtra*, and architects and master painters;⁶² the latter—since he had transferred his capital three years earlier—apparently to assist in the embellishment of a new palace. In addition, Professor Sekino has shown convincing proof of the connection through actual remains.⁶³ In the neighborhood of the ancient city of Kongju 公州 (Jap. Kōshū) there is a large subterranean tomb, whose elaboration makes clear that it must date from the 63 year period between 475 and 538, when Kongju was the capital of Pekche. Its walls are lined with flat tiles, stamped with unusual patterns not found elsewhere in Korea; almost exactly the same designs have been found on tiles unearthed in Nanking. Sekino believes that the tomb is that of one of the kings of Pekche, of the early sixth century, and that its unusual features probably mean that it was built by artisans imported from south China. The presumption seems justified, therefore, that the Buddhist architecture of the "Kudara" style imported to Japan later in the century was derived ultimately from south Chinese traditions.

It is by no means certain that any serious differences existed in the Six Dynasties period between the Buddhist arts and architectures of the north and the south. In view of the almost complete lack of archaic Buddhist remains of any sort in south China, the point can be argued only on theoretical terms. Granted the possibility of some degree of separate evolution, however, this geographical contrast of source may well explain the occasional divergence of design and details between Hōryūji and the monuments of the northern current exemplified by Korean tombs and Chinese cave temples.⁶⁴

No traces of temples contemporary with the Asuka period or earlier, undisguised by later additions, have been found anywhere in China; and although much information regarding their form may have been preserved in the more obscure literary sources, that which is readily available is extremely meager. It is sufficient at least to prove the two objects of the present inquiry; first, the existence, during the Six Dynasties in China, of the type of monastery plan traceable, farther east, from Korea to Japan at least in its essential elements of pagoda and Buddha hall, standing in that order on a south-to-north axis; and second, the ultimate derivation of this sort of axial and symmetrical plan not from the source of Buddhism itself, in India, but from an already long-existing tradition of secular architecture in China.

Among the writings generally admitted to be the work of the famous Chinese monk Tao-hsüan 道宣, of the mid seventh century, there is one which purports to be a description of the Jetavana monastery in Srāvastī, donated to the Lord Gautama Buddha and his followers by the rich merchant Anāthapiṇḍada.⁶⁵ The details of this account are elaborate

⁶² *Samguksagi*, Pekche section, King Song 19th.

⁶³ Sekino T., "Kure 埴 yori mitaru Kudara to Shina-nanchō betsu ni Ryō 梁 to no bunka-kanken," *Hōun* 寶雲, x, 1934, pp. 23 ff.

⁶⁴ *Chung T'ien Chu Shē-wei-kuo Chih-yüan-ssü T'u Ching* 中天竺舍衛國祇洹寺圖經, Taishō-issaikyō no. 1899, pp. 882 ff.

and fantastic, surrounding what may have been a small kernel of information by a much greater proportion of hearsay and pure imagination. The layout given the monastery, strictly symmetrical and facing toward the south, is certainly Chinese rather than Indian. According to the description, there was a succession of great gateways along the central avenue, surmounted by lofty pavilions, and giving access at last to the main, central precinct 中院. Passing through the last of these, "it was not far to a great square pond, filled with lotus blossoms. . . . Directly north of the pond was the great Buddha pagoda. . . . Next to the north was the great Buddha hall." There was also a great "rear hall" 複殿. The axis was elaborated on either side by high pavilions balancing about each of the central halls, and beyond the last-mentioned continued even further to the north. The details given within the scheme are generally quite incredible; but there is no question that the general plan itself was of the type imported to Korea and Japan. As will be evident later, it was a type which seems to have been generally superseded by the seventh century in China proper. Tao-hsüan, writing in 667, was using a collection of earlier Chinese descriptions, of which one was a so-called "Record of Holy Sites" 聖迹記, by the Sui dynasty monk Ling-yü 靈裕. The architectural form given the Jetavana in his final compilation must therefore have been that which was the standard and ideal of earlier centuries in China.

This standard seems to have been most magnificently exemplified, among real monuments, in the sixth century monastery of Yung-ning-ssü 永寧寺 at Lo-yang, celebrated ever since as the greatest architectural achievement of the northern courts. The essentials of this tremendous work, as given in the almost contemporary "Record of the Monasteries of the Eastern Capital," runs as follows:⁶⁵

"Yung-ning-ssü was erected in the first year of Hsi-p'ing (516) by the Dowager Empress Hu Shih (of the Northern Wei). . . . At its center was a nine-storeyed pagoda with a structural framework of wood. This rose 900 feet, with a spire 100 feet higher still; it covered an area 1000 feet in perimeter; at a distance of 100 *li* from the capital, it was still visible. . . . Upon the spire there was a gold "treasure vase," containing 25 stones' measure; beneath this there were 30 tiers of gold dishes to hold dew, each with gold bells all around. Four lines of iron chains led down from the spire to the four corners of the pagoda, these also having upon them golden bells, each the size of a stone tomb figure. Furthermore golden bells were suspended from the corners of the nine storeys of the pagoda, from top to bottom, 120 in all. The pagoda had four sides, each with three doors and

⁶⁵ *Lo-yang Ch'ieh Lan Chi* 洛陽伽藍記 (compiled by Yang Hsüan-chih 楊街之 of Posterior Wei), i, Yung-ning-ssü section.

中有九層浮圖一所架木爲之舉高九十丈有利復高十丈合去地一千尺...刹上有金寶餅容二十五石寶餅下有承露金盤三十重周匝皆垂金鐸復有鐵鎖四道引刹向浮圖四角鎖上亦有金鐸鐸大小如一石瓮子浮圖有九級角角皆縣金鐸合上下有一百二十鐸浮圖有四面面有三戶六窗戶皆朱漆扉上有五行金釘合有五千四百枚復有金環鋪首布殫土木之功窮造形之力...浮圖北有佛殿一所形如太極殿中有丈八金象一軀...僧房樓觀一千餘間彫梁粉壁青瑣綺疏難得而言...寺院牆皆施短椽以瓦覆之若今宮牆也四面各開一門南門樓三重通三道去地二十丈形製似今端門圖以雲氣畫彩仙靈...赫麗華拱門有四力士四師子飾以金銀加之珠玉裝嚴煥炳世所未聞東西兩門皆亦如之所可異者惟樓二重北門一道不施屋似鳥頭門

Chien-chung-ssü section; *do.* i.

six windows. The former were all lacquered red, and the door leaves had each five rows of gold nail-heads at its top, there being of these 5,400 in all; at each nail-head was set a gold disk.

"To the north of the pagoda was the Buddha hall, in form like the Hall of State, T'ai-chi-tien 太極殿. At its center was an 18 foot gold image. . . . The priests' quarters had an upper storey, and more than 1000 chambers; with their carved beams and their walls made confused (by ornament), their green pendants and spread-out silks, they were difficult to describe.

"The outer walls of the monastery were all provided with short rafters, and were covered with tiles like those of present day palaces. One gateway opened in each of the four faces. That on the south had a three-storeyed tower, with a triple passageway leading through. It rose 200 foot from the ground, and in form resembled the outer Imperial palace gateway, Tuan-mên 端門. The designs painted upon it were of cloud forms, Immortals, and supernatural beings; . . . Spaced around this gateway were four Protectors 力士 and four lions, adorned with gold and silver. . . . The east and west gateways were the same, except that their towers were two-storeyed only. The north gateway was not treated as a building, but was like a 'crow-headed gate' 烏頭門 (i.e., two posts with a lintel)."

The description of Yung-ning-ssü fails to mention any lecture hall. This element, always less fundamental to worship than the pagoda or the Buddha hall, must have reached importance only at a comparatively late period.⁶⁵ References to the lecture halls of other Lo-yang monasteries occur elsewhere in the same record. One of these was Chien-chung-ssü 建中寺, founded in 528 through the gift of the buildings of a great prince's mansion; at which time "the offices 前廳 in front were made the Buddha hall, while the hall at the rear became the lecture apartments 講室."⁶⁶ This establishment thus contained two important features of the "Kudara" plan, in the orthodox positions; but here the pagoda was lacking. The notices given of the other metropolitan temples provide no further evidence of a standardized plan like that followed so strictly in Korea and Japan. This may show that the latter regions were drawing their precedent from a more highly developed practise in south China. On the other hand, it may well be a first sign of a different sort of contrast, later to become more evident; the comparative freedom of design of an originating culture, as opposed to the anxious orthodoxy of distant imitators.

The earliest reference to the essentials of the "Kudara" plan known to me concerns the monastery of Ho-tung-ssü 河東寺 in Ching-chou 荊州, Hupei, one of the largest establishments maintained under the southern courts. Here, according to records compiled in another work by Tao-hsüan, the *Lü Hsiang Kan T'ung Chuan* 律相感通傳 of 667, the great Buddha hall was a work of the latter part of the fourth century, "13 bays long and with cross-beams 55 feet long between two rows of columns only, its brackets and bearing-blocks piling up in tiers, the very height and crown of the realm. . . . The pagoda in front of the hall was erected by I-chi, prince of Ch'ien (the seventh son of Wu Ti of the), Sung 宋護王義季"—i.e., in the second quarter of the fifth century.⁶⁶

⁶⁵ *Taishō-issaiyō*, no. 1898. This text is to be compared with a contemporary quotation of it in the *Fa Yüan Chu Lin* 法苑珠林, 89 (*ibid.*, no. 2122; by the monk Tao-shih 道世).

大殿一十三間唯兩行柱通梁五十五尺欂櫨重疊國中京冠。

By the same account, the temple was first erected by the departmental magistrate of Ching-chou,

The stage of monastery design antedating the adoption of the "Kudara" plan in China is illustrated by descriptions of an establishment of the late second century, perhaps the earliest formal Buddhist temple in the Far East. According to the *San Kuo Chih* 三國志, this was erected by one Chai Jung 笮融, a native of Kiangsu. Collation of evidence places the date between 189 and 193 A.D.⁶⁷

"He erected a Buddha shrine, making a human figure of bronze, painting its body with yellow gold, and clothing it in brocaded silks. He suspended nine tiers of bronze plates, with a two-storeyed pavilion beneath; the covered galleries could contain 3000 persons or more. . . ."

A variant account in the *Hou Han Shu* mentions the "galleries round about the hall" 堂閣周回. These must certainly have been the prototype of the typical monastery cloister colonnade of later centuries. The "shrine" itself, however, combining as it did the features of both pagoda and Buddha hall, must in the light of later conventions have been a startlingly heterodox form, explainable only as the result of enthusiasm and incomplete knowledge of Indian practise.

In Japanese and Korean monastery remains, as we shall see, the "Kudara" plan disappeared around the middle of the seventh century, being supplanted by more elaborate plan types. The change in Chinese practise which this provincial evolution echoes must have been accomplished in Sui or early T'ang, relegating the earlier design to the status of a rare survival. The Japanese monk Jikaku-daishi 慈覺大師 during his sojourn in China at the middle of the ninth century, came across the "Kudara" plan in two establishments which he specifically mentions.⁶⁸ Both were apparently of great age. One, in which a thirteen-storey brick pagoda rose in front of the Buddha hall—"in front of" signifying "to the south of" in the immemorial Chinese tradition of orientation—was the temple of Lung-hsing-ssü 龍興寺, outside of Lai-chou 萊州 in Shantung; it stood desolate and abandoned among its ruined colonnades, only two monks remaining. The other was one of the famous places of Wu-t'ai-shan 五台山, the Ta-hua-yen-ssü 大華嚴寺. Here, in front of the "pavilion" 樓, was a two-storeyed, octagonal pagoda, which had been built over another buried in the earth of its base, of such antiquity that it passed as one of the *stūpas* erected by King Aśoka's missionaries. In this case, the T'ang temple obviously was preserving an archaic form because of its hallowed associations. Perhaps for some special iconographic reason, the single pagoda on axis in front of the Buddha hall appears in a tenth century painting of the celestial palaces of Paradise, at Tun-huang.⁶⁹ Probably as a

Huan Chung 桓仲, to give shelter to monks driven south by the conquests of Fu Chien of the former Ch'in (i. e. around 380 (A. D.)). The Buddha hall was the work of their leader, priest I 翼法師.

⁶⁷ *San Kuo Chih*, *Wu Chih* iv, biography of Liu Yao 劉繇.

大起浮圖祠以銅爲人黃金塗身衣以錦垂銅盤九重下爲重樓閣道可容三千餘人。

Also in *Hou Han Shu* ciii, biography of Tao Ch'ien 陶謙.

⁶⁸ Cf. the *Nittō-kyūhō-junrei-gyōki* 入唐求法巡禮行記, *D-n-bukkyō-zensho*, *Yūhōden-sōsho* i, pp. 220, 224. Jikaku-daishi, called Ennin 圓仁 (794-864), studied on Hieizan under the founder of Japanese Tendai, Dengyō-daishi 傳教大師. In 838 he went to China for a stay of 9 years, to study T'ien-t'ai rites and books.

⁶⁹ Pelliot, *Grottes de Touen-houang*, Paris, 1920, pl. ccxvii, cave 117. No explanation of this unusual background is given by Matsumoto 松本 in his studies of Tun-huang iconography, *Tonkōga no Kenkyū*, Tōkyō, 1937, pp. 61 ff.

sign of provincial backwardness, it may be found as late as the eleventh in two surviving monuments of Liao, the pagodas of Fo-kung-ssü 佛宮寺 in Shansi and of P'u-shou-ssü 普壽寺 in Hopei.⁷⁰

The second point to be established by Chinese evidence—the fact that the early Buddhist monastery of the Far East was a direct continuation of long-established Chinese architectural tradition, rather than an importation from India—is stressed repeatedly in the description of Yung-ning-ssü at Lo-yang, quoted above. The Buddha hall there resembled the Hall of State of the imperial palace; the south gateway was like the outer gate of the palace; the outer walls with their tiled roofs were like the walls of contemporary palaces. The reference in the same work to Chien-chung-ssü, the palace which was turned into a monastery, with its two principal buildings becoming the Buddha and lecture halls, is the sort of notice which is found again and again both in China and Japan. Except for such exotic features as the pagoda, the two currents of secular and religious architecture have from the start run close, parallel courses in the Far East. The difference between the two in China has never been much more than a matter of name tablets and interior decorations. Peking today contains many monasteries, like the "Mongol Temple," which were first constructed to be the mansions of great princes, and were later turned to religious use with only minor alterations at the death or conversion of their owners. In Japan, as will be seen in subsequent chapters, the case is somewhat more complicated; and a thousand years of slowly maturing national tastes have produced architectural types which may vary widely according to their religious or secular use. A common meeting-ground between the two has remained until modern times, however. The informal place of worship in the typical Japanese monastery of today is merely a room larger than those around it used for domestic purposes, a room given religious character primarily by its furnishings. In more formal architecture, the meeting-ground between palace and temple has been maintained throughout Japanese Buddhist history. In the monastery of Tōshōdaiji near Nara, the existing lecture hall (fig. 9) began its life as an assembly building, or Chōshūden 朝集殿, in the eighth century palace of Heijō.¹¹⁹ In Ninnaji 仁和寺, in the western suburbs of Kyōto, the present main hall was first constructed as the living quarters, Shishinden 紫宸殿, of the imperial palace of the early seventeenth century.

To produce the unanimity of Chinese style, several factors must have worked together in the first centuries of Far Eastern Buddhism: the great age and prestige of Chinese architectural tradition on the one hand; on another, the comparative simplicity of Buddhist requirements for ceremony and monastic life; on a third, perhaps, the completely alien and unreproducible character of Indian style. Indian monasteries of the first centuries after Christ seem to have been fairly elaborate in the number and variety of their architectural elements. The Jetavana Vihara at Śrāvastī is described in the *Mahīśāsaka-vinaya* 五分律 as including among its buildings a "walking up and down place" 經行處, a lecture hall, a bath-house, a refectory, kitchens, and various chambers, in addition to the Gand-

⁷⁰ Cf. Liu Tun-tseng, "A brief report of a preliminary investigation of the ancient architecture of the western section of Hopei Province" (in Chinese), *Bull. of the Soc. for Research in Chinese Archit.* v/4, June 1935, pp. 29-30.

hakuti 香室 Buddha hall at its center.⁷¹ None of these elements, transferred to China, required a specifically Indian treatment, or was indeed essentially unfamiliar. The needs even of the Buddha hall could be satisfied by the existing Chinese monumental ground-plan, as the next chapter will show in greater detail. The program of the lecture hall was answered by any large building capable of sheltering a great many men at one time for a sedentary purpose; even the specific function of the building had been anticipated in China as early as the Han, to accommodate expositions of the Confucian classics. For almost every element in the Buddhist monastery, therefore, the Chinese had no need to use anything but familiar forms. Even if imitation of the unfamiliar had been desirable, it would have been almost prohibitively difficult. Very few Chinese ever reached India, in contrast to the great numbers of Japanese who travelled to the continent to study one phase or another of Sui or T'ang culture. A building is not carried from one country to another, like an icon, except in miniature reliquary form; and in the latter case it must have been the *stūpa* with which the Chinese became acquainted, rather than any other architectural type. Few indications of architectural style are contained in the Indian scriptures, and those which do appear can hardly have been conducive to imitation. The *Mūlasarvāstivāda-nikāya-vinaya-samyuktavastu* 有部毘奈耶雜事, x, stipulates that "in building a temple for monks, the dormitories 僧房 must be made five-storeyed, the Buddha hall seven-storeyed, and the gate towers also seven-storeyed. . . ." ⁷² The building type suggested is completely alien to Far Eastern constructive methods; the command was conveniently forgotten, and the Chinese instead followed their own style, established through centuries of secular practise.

The earliest formally laid out Buddhist temples in China were doubtless on a much smaller scale than Yung-ning-ssū at Lo-yang in the sixth century, and their parallels were with less pretentious secular architecture than that of the Imperial palace. The character universally used for a Buddhist temple in the Far East, *ssū* 寺, is not limited to its religious meaning alone.⁷³ In the Han dynasty, just prior to the introduction of Buddhism, it was used as a general designation of government offices. Identity of name here must indicate a close similarity of form. The definition given for *ssū* in the Han dynasty dictionary *Shuo Wen* makes it equivalent to *t'ing* 廷, or courtyard, place of assembly; this again must be an indication of essential plan design, common both to the public bureau and to the later temple. The notes scattered through Han texts which serve as evidence of the layout of such offices show a standard form varied only in scale and in minor accessories: gateways leading into a fore-court and thus to the main administrative building, with a private, residential compound to the rear; the whole of course scrupulously balanced about a central axis. An increase in size, approaching more closely the scale of a palace, involved the use of two major halls. It is obvious that such a secular scheme, lies behind the early monastery designs still visible in Korea and Japan.

The one element of the Buddhist monastery program which was at once essential to

⁷¹ Nanjio no. 1122; *T-issaikeyō* no. 1421 gives Chinese translation.

⁷² Nanjio no. 1121; *T-issaikeyō* no. 1451.

⁷³ Cf. Tanaka, "The archaic type of Buddhist temples in China" (in Japanese), *Bijitsu-kenkyū* xvi, April 1933, pp. 133 ff.

worship, and entirely without provision in Chinese architectural experience, was the *stūpa*. Even with this the Chinese did all they could to make the exotic form familiar, adding the details of their own wooden towers and producing thereby the almost completely Far Eastern architectural type of the pagoda. A major difficulty of plan adjustment remained. The *stūpa* had been the all-important center of early Indian monasteries; the tower had never been more than a minor enterprise in Chinese secular tradition. The difficulties of assimilating this one completely alien element are obvious in the first monasteries of Japan; and the various solutions adopted form an important part of stylistic development in early centuries.

THE NARA PERIOD: GENERAL:

The latter half of the seventh century and the first half of the eighth in Japan saw a striking advance of Buddhist temples in size, elaboration, and numbers. A combination of factors produced this unprecedented expansion. Direct contact with China, begun in the age of Shōtoku-taishi and continued thereafter by the frequent despatch of embassies, priests, and lay scholars to the continent, furnished both a powerful stimulus and direction for native energy. In comparison with the simplicity of their own land, the marvels of Ch'ang-an and Lo-yang, where palaces and temples vied in a bewildering contest of scale and richness, must have seemed to the travellers from Japan like a revelation of some Heaven of the *sūtras*, almost incredible as the work of man. The stories they brought back fired the imagination of their rulers, as the vision of Italy flashed over northern Europe in the Renaissance, and aroused that ambition which is stronger in the Japanese than in other race. There was no question of any further dependence on the provincial imitations of Korea. The ultimate had been seen, and furnished thereafter the only standard, to be pursued for two centuries with an enthusiasm limited only by what was physically possible within the island kingdom.

In the Nara period—as a minor factor of encouragement—such limits were appreciably widened beyond what was possible before or after, by the short-lived centralization of authority which followed the adoption of a Chinese governmental system. The power of the Court was extended over the whole of settled Japan, in reality as well as in name, and the whole of the nation's resources were available for its ambitious purposes. In this extension and centralization the Buddhist temples were directly involved, since the spread of the religion beyond the home provinces seems to have been encouraged in part as a means of unifying the culture of the race, and thereby increasing its susceptibility to political organization. The decree of Shōmu-tennō in 747, that every province throughout Japan should establish a monastery with a pagoda and a nunnery, dedicated to a standardized form of worship—the greatest single act of encouragement given to Buddhist building during the Nara period—must have had such an idea as one of its motives.⁷⁴ Under the same Emperor, again, the new scale of achievement made possible by a centralized political and economic control, had its perfect illustration in the tremendous efforts expended by the state in the manufacture of the colossal bronze Buddha of Nara, and the erection of the

⁷⁴ See note 34, and pp. 44-45, below.

colossal Tōdaiji to receive it;⁷⁵ while this unprecedented accomplishment in the service of the church was matched in lay architecture by the creation within the same eighth century of the two great capitals of Heijō and Heian.

The greatest incentive toward the advance of Buddhist building, however, doubtless came from the progress of the religion itself. Buddhism, admitted to Japan in the last quarter of the sixth century as an experiment, and bitterly opposed by one of the most powerful factions at Court, had become in its first century of existence a Japanese institution, indispensable to the conduct either of an individual life or of the state. In its most profitable functions of safeguarding the body and spirit of the Emperor and the peace of the realm, it had created a series of observances which with every generation grew to be more frequent, numerous, and elaborate, and a more certain guarantee of its own continuing prosperity.⁷⁶ The Emperor, as the greatest patron of the Three Treasures and the leader of his people along the true Way, was committed by the beginning of the eighth century to an expenditure on religious practises which must already have accounted for a large fraction of the national income and energy. The insurance of his bliss and eventual Enlightenment in future lives, required constant expensive renewal at all times. With his illness, the outlay was increased; monks were entertained at maigre feasts, lanterns were lit, rites of repentance were performed, and lavish offerings were made. At such times it was the Lord of Healing, Yakushi-nyōrai, who profited most from the anxiety of the Court. His seat at Yakushiji (the temple whose pagoda is the sole remaining full-sized representative of the "proto-Nara" style) had its origin in a vow of the Emperor Temmu (672-686) to manufacture and suitably enshrine His image as a means of causing the recovery of the Empress.⁷⁷ The "new temple" of this same Buddha, Shinyakushiji, is said to have been founded in a similar way at the middle of the eighth century by the then Empress, Kōmyō, to overcome an eye disease from which her consort Shōmu was suffering.⁷⁸

An Imperial demise required observances of equal elaboration, to ensure the safe passage of the August Spirit through the 49 days of wandering which it must endure before taking up its new abode, and to guarantee its good fortune thereafter. These arrangements, through most of the Nara period, seem to have been made on a constantly rising scale, more lavishly celebrated in more and more temples with each event. When Shōmu-tennō died in 756 they might have been thought at a maximum. The seventh and fourteenth days thereafter were marked by *sūtra* readings (and attendant rites and offerings) in the "Seven Great Temples" of Nara; the twenty-first day by the same in all temples of the capital; and the ends of the fifth, sixth, and seventh weeks by great maigre feasts at Daianji 大安寺, Yakushiji, and Kōfukuji 興福寺 respectively. On the last day, also, all the personal effects of the Emperor's household—objects many of them of incalculable value—were presented with appropriate rituals to the great Rōshana-butsu of Tōdaiji (to form the nucleus of the present Shōsōin collection). On the anniversary of the death, a great feast

⁷⁵ See below, p. 54 and note 99.

⁷⁶ For a detailed discussion, cf. M. W. de Visser, *Ancient Buddhism in Japan*, Leyden, 1935 (from which I quote hereafter).

⁷⁷ See below, p. 46 and note 80.

⁷⁸ See below, pp. 53, 74 and note 94.

was held at Tōdaiji in the "golden" hall, to entertain over 1500 monks. In a few years, however, the provincial monasteries and nunneries founded by Shōmu-tennō came into effective use, and made it thereafter possible to outdo in extensiveness even such a schedule of mourning. When his widow died in 760, it was decreed—in addition to the usual vegetarian feasts and periods of *sūtra* reading in the capital—that every province have executed a painting of the Paradise of Amida (in which the Dowager Empress had hoped to be reborn); that all provincial monks should adore and make offerings to this Buddha; and that all monks and nuns should make copies of the *sūtra* describing the beauties of His Paradise. A year later, the nunneries were ordered each to make and install for worship images of the Amida Trinity, 16 feet high. Finally, on the death of Kōnin-tennō in 781, observances again rose through the "Seven Great Temples" and those of all Nara, in successive weeks to a climax on the forty-ninth day with maigre feasts held all over Japan; while the anniversary a year later was marked by *sūtra* reading in all the same temples.

A similar tendency marked the use of Buddhism in the Nara period as a guardian of the state against all calamities and evil influences, real and supernatural. The brunt of this service was borne by three *sūtras*, the *Ninnō*, *Daihannya*, and *Konkōmyō*; whose texts (with a charming fusion of philosophical nihilism and material practicality) promise the aid of large numbers of benevolent deities against any conceivable need, as a return for the performance of the proper rites in their honor. In 660 a combination *Ninnō-hannya* ceremony was held (apparently in the Imperial palace), with the ostentatious setting of 100 pulpit thrones for 100 high priests which the *Ninnōkyō* demands. As early as 676, one can see the desire to increase the efficacy of this divine insurance by spreading its payments over a wider area; for in that year messengers were sent to all the provinces to expound the same two *sūtras*, while the districts near the capital were ordered to perform the holy service of releasing animals, birds, and fishes which had been caught for food. According to the twelfth century ecclesiastical history *Fusō-ryakki*, the reason for these measures was a famine.

In subsequent years the performance of ceremonies in connection with the realm-guarding scriptures expanded continually, both in the capital and in the rest of Japan. Copies of the *Konkōmyō* were sent to the provinces to be read periodically, in ever increasing numbers. *Daihannya* meetings were held in 703 in the then "Four Great Temples" of Nara; and in 725 were repeated in the Imperial palace, with 600 monks in attendance to correspond to the *sūtra's* 600 chapters. In 737 Shōmu-tennō—whose piety was responsible for the most remarkable advances made by Buddhism during the period—ordered that every province should have manufactured 16 foot gold images of the Shaka Trinity, and should see that one complete copy apiece of the *Daihanyakkyō* was written out and read by the skipping system. The reason for the move is not given, but may very well have been an epidemic of smallpox which had been ravaging the capital for the previous two years, not sparing even the great and devout in its spread.

In 740 the same Emperor, following perhaps an established policy, commanded that every province make ten copies of the *Hokkekyō*, and build a seven-storeyed pagoda. The next year, as a crowning requirement, he decreed that every province should erect an official monastery for twenty monks in connection with its pagoda, and also a convent for

ten nuns. The monastery was to receive a title clearly indicative of its purpose, *Konkōmyō-shitennō-gokokuji* 金光明四天王護國寺, the "Realm-guarding Temple of the Four Heavenly Kings of Gold-gleaming Radiance." In it on the eighth day of every month the *Konkōmyō sūtra* was to be expounded; and for that purpose, one copy of the *sūtra* written in gold was to be presented for installation in the pagoda by the Emperor, while ten more were to be prepared by the province. The nunneries were given the complementary function of preparing for future prosperity by removing the obstacles imposed by past sins. They were dedicated to the performance of rites based on the *Lotus Sūtra*—most effective for this purpose—and in its honor were entitled *Hokke-metsuzaiji* 法華滅罪寺, "Sin-extinguishing Temples of the Flower of the Law."

The program thus laid down was taken with great seriousness by the Court. An Imperial proclamation of 741 attributed to the move of the previous year the cessation of devastating storms and the improvement of crops. On the other hand, earthquakes which followed a few years later were explained by the incomplete fulfilment of the scheme; and in an edict of 747 the provinces were ordered to finish "golden" hall, pagoda, and dormitories in their respective monasteries within the next three years. In 758 another *sūtra*, the *Kongōhannyakyō*, was found to be of such supernatural efficacy that each province was ordered to copy out 30 books to be used as a secondary text "for the repose of the Court and the great peace of the realm." With the bringing of all this spiritual equipment into working order, it was at last possible to safeguard Emperor and nation with the best means known at the time. Thus when an exposition of the guardian *Ninnōkyō* was held in 772, the ceremonies were carried on simultaneously in the Imperial palace, in all the temples of Nara, and in all those officially established in the provinces.

Beside such a policy of multiplication of points of defense over as wide an area as possible, the alternative method was tried of making one focal point as efficacious as possible by enormous size. To this end, Shōmu-tennō concentrated the strength and resources of the whole country on the erection of Tōdaiji in Nara, to be the shrine—also "realm-protecting"—of the largest Buddha possible in Japan.

In addition to the monasteries thus officially dedicated for public purposes, others were founded in the Nara period by private individuals, for the benefit of themselves and their parents. These must in general have been on a much smaller scale than those supported by the government. Even in the eighth century, however, the fortunes of the Fujiwara clan were at so high a level that their private foundation of Kōfukuji in Nara was one of the largest in the capital, and was equipped on a scale comparable to that of any others in its generation.⁷⁹ The number of such establishments is unknown, I believe; but was great enough by the end of the eighth century to have become an obvious burden on the resources of the country, so that an Imperial edict was necessary in 783, limiting them to a list approved by the state.

With so many incentives to expansion, with so frank an emphasis given by the highest authorities to the virtues of size and numbers in religious practise, it was natural that Buddhist monasteries should develop rapidly in scale and elaboration, far beyond the simple standards of Shitennōji and Hōryūji. It was natural, also, that the tremendous

⁷⁹ See below, p. 50 and note 86.

efforts of the Nara period should have been a phenomenon possible only once in Japanese history, in an age of first enthusiasm and still undrained resources. The equipment of Nara with palaces and monasteries of a size and magnificence undreamed of in previous centuries, the expenditure of the wealth and strength of the entire nation on the building of Tōdaiji and the provincial temples, and the eventual abandonment of the whole region in favor of a new capital at Kyōto, left Japan materially and emotionally exhausted; so that her later achievements necessarily lapsed to a more moderate level.

THE PROTO-NARA PERIOD (645-710): "HAKUHŌ":

Prime evidence for the general plan of this period, preceding the actual transfer of the capital to Nara, is given by one temple, Yakushiji. There were two successive establishments under this name.⁸⁰ The earlier, now entirely in ruins, represents the original founda-

⁸⁰ The main facts of the establishment of Yakushiji are well attested by early texts, as follows:

Nihon-shoki, Temmu-tennō 9/11 (680), p. 521: "The person of the Empress Consort (the subsequent Empress Jitō) being unwell, the erection of a temple to Yakushi was begun as a vow made on her behalf. Furthermore, 100 persons took up religious life as monks. In consequence, she obtained (a return of) good health" (cf. Aston, ii, p. 348).

Do., Jitō-tennō 11/6/26 (697), p. 572: "Ministers and public functionaries began the making of Buddhist images vowed for the sake of the Empress' health" . . . Same year, 7/29, p. 572: "Ministers and public officials held an eye-opening ceremony (to dedicate the completed images) at Yakushiji" (Aston, ii, p. 422).

Shoku-nihongi, Mommu-tennō 2/10 (698): "The construction of Yakushiji being nearly completed, an Imperial Command was given to the priests to occupy their quarters in this temple" (cf. translation by J. B. Snellen, *Transactions of Asiatic Soc. of Japan*, Second Series xi, Dec. 1934, p. 176).

Do., same reign, Taihō 1st/6 (701): "The courtiers Hata no Mukobe . . . and Kosobe no Yamaro . . . were appointed supervisors of the construction of Yakushiji" (Snellen, p. 193).

Shōji-engishū 諸寺縁起集, section on Yakushiji: (written at the outset of the 11th century by priest Shōhan 清範, as a summary of temple histories): "In the year 己酉 (709) the capital was moved to Nara (to be the) Heijō-kyō . . . The Retired Empress (Gemmyō) in Yōrō 2nd (718) transferred the monastery to Heijō-kyō. From the 8th of Temmu-tennō . . . to that date, there had been a passage of 39 years. From Yōrō 2nd to the present time, Chōwa 4th (1015), the temple has existed for 299 years. . . . The above is summarized from the text of the history 流記文."

The "history" referred to may well have been a document like that of Hōryūji—also known as 流記—prepared in 747 in accordance with the general order issued to Buddhist monasteries.

More complete accounts of the early history of the temple are given in the *Yakushiji-engi* 藥師寺縁起 (dated 1333), and in the *Fusō-ryakki*. These texts are quoted under the temple in *Kōji-ruien*, *Shūkyōbu* 古事類苑宗教部, iii, pp. 1249 ff. A somewhat vaguely phrased summary of the origin and erection of the first Yakushiji is given by the inscription on the spire of the present Yakushiji pagoda, which connects it closely with three Imperial personages—probably Temmu, Jitō, and Mommu, the last standing as completer of the first's design. The text of this inscription was apparently written at the outset of the 8th century, to be placed on one of the spires of the original Yakushiji.

The existing pagoda of Yakushiji in Nara has for a generation been the subject of critical debate. Three principal theories have been long current to explain its date. The first claims that it is one of the original pair set up at Asuka, which in 718 was dismantled and transferred to the new site. To support this hypothesis—put forward most strongly by Ōoka 大岡 in his detailed study of the remains of the two monasteries, *Kenchiku-zasshi* 519—are the facts that: (1) dimensions of the original Yakushiji, as given by

tion at the then capital of Asuka, in lower Yamato, vowed by Temmu-tennō and completed by his widow, the Empress Jitō, during the early years of her reign (686-96). The second is the present temple, as transferred, after the removal of the capital, to the environs of Nara in 718. Here in addition to platforms and column bases, one building remains from this period, the three-storeyed pagoda; the actual date of this is hotly disputed, but there is no doubt of its preserving the style of early Nara, even if as a sort of archaism of a later generation. The present Yakushiji falls in date of erection within the Nara period

column bases, check almost exactly with those of the later; (2) the style of the existing pagoda is too immature to allow it to be a work of from 720 on. The second theory, sponsored by Sekino and Amanuma 天沼, varies from the first in one detail. The existing pagoda is unique in the fact that its three principal storeys are supplemented by minor enclosed galleries between, so that there are actually six roofs. The remaining column bases of the Asuka Yakushiji do not include any stones to provide for such a gallery on the ground level; therefore it has been supposed that these elements, called *mokoshi* 裳階, were added when the two pagodas were reassembled on their new platforms at Nara. The third theory, proposed by Kita, sees in the existing pagoda a new construction dating after 718.

In recent years, important new evidence has been published by Adachi (*Kokka* 國華, 483, 485, 487, 491). He presents two strong arguments to prove that the present pagoda was indeed erected as an entirely new building on the new site, in the later 720's. One demonstrates that the two pagodas of the original Yakushiji remained *in situ* until the 12th century; and that in the third quarter of that century they were taken down and transported to Kyōto, to be used in the great Fujiwara temple of Hōjōji 法成寺. (This evidence is furnished by a notice in the *Chūyūki* 中右記, a record of court affairs between 1087 and 1135, by Fujiwara no Munetada 宗忠 [1062-1141]. The entry notes the dedication of new pagodas at Hōjōji in 1132, and summarizes the history of their predecessors: original single pagoda burned in 1058; "thereafter the project was formed of transferring the pagodas of Yakushiji, to make two [three-storeyed, each storey with a gallery, containing the scenes of the Eight Stages of the Buddha's attainment of Nirvana]. The dedication took place in Shōryaku 3/10/5 [1079]" 其後有義移藥師寺塔成二基三重每重有母層作八相成道. In 1117 the two pagodas and the great south gate were burned. Cf. Adachi, *Kokka* 483, p. 46.)

Adachi's second argument to prove that the existing pagoda was newly built in the 720's concerns the matter of relics. Examination of the two remains at the original site shows that the relics there were deposited in the eastern pagoda (where the central stone has a deep socket cut out to receive them) and not in the western, where the stone has no such treatment. At the Nara Yakushiji this was reversed, and it is the ruins of the western which show a provision for relics. To Adachi it seems unreasonable that if the two original pagodas were moved in 718, their relative positions or their equipment with or without relics should have been reversed. In addition, the 13th century pilgrimage record *Shichidaiji-nikki* 七大寺日記 states that relics from the original Yakushiji were then enshrined in the "golden" hall of the Nara Yakushiji, having been found as the result of a vision granted to one of the latter's priests. The point of the story seems to be that they were recovered from the original site after the two pagodas there had been taken away to Kyōto; presumably their existence had been forgotten, so that they were not removed to Hōjōji. All of this is contrary to what would have been the natural procedure had the original pair really been dismantled and moved in 718; the relics from the original eastern pagoda would have been placed in the foundation stone of the present building—where there is actually no provision for them, as repairs have shown.

All credible and comparatively early texts, like the *Fusō-ryakki*, state that the (existing) eastern pagoda of Yakushiji was first erected 始建 in 730. At that date, as will be seen below, its details and the general plan of the monastery itself were old-fashioned, and far behind the achievements of new construction around the capital. It is obvious that the rebuilding must have reproduced the forms of the original, laid out a generation earlier, as carefully in details as in ground plan and dimensions. Adachi believes this deliberate archaism was the result of the strong reverence felt for the original (whose construction by the Emperor Temmu had saved the life of his consort, the later Empress Jitō).

proper, but is included here because a comparison with the earlier site shows that its second building was almost identical with the first.

The chief difference between the ground plan of Asuka in either its Shitennōji or Hōryūji versions, and that of the later seventh century exhibited in the two Yakushiji sites, is that in the latter there are two pagodas instead of one, symmetrically placed about the main north-and-south axis (figs. 12, 13). There seems to be no good doctrinal reason for this change, and its theological explanation, that the two stand for Buddhist Cause and Effect, is too labored to appear anything more than an excuse manufactured to justify a departure from earlier orthodox practise.⁸¹ Actually the appearance of two pagodas seems the one solution possible at this period of the dilemma of the Hōryūji ground plan. By the Nara age (and perhaps earlier in China, where the change was undoubtedly first made), the Buddha hall had definitely usurped the position of prior importance in the monastery layout. The problem of what to do with the pagoda was solved in two ways. One, perhaps the later, peculiarly Chinese and so far as I know never attempted in Japan, was to place it on the central axis behind the Buddha hall.⁸² The only alternative to this possible within the orthodox Chinese system of axially symmetrical planning, was to erect twin pagodas, placing one on the east of the hall and the other on the west.

In the climax of later Nara monastery organization reached at the mid eighth century in Tōdaiji, when every element of the typical ground plan reached its fullest development, these two pagodas were widely separated and treated as independent units, each with its own surrounding corridors and gates, lying well outside the main cloister area (fig. 15). In the "proto-Nara" scheme typified by Yakushiji, the layout was clearly transitional between the final stage and Asuka tradition. In both the sites of this temple, the twin pagodas lay still inside the main courtyard, as the single one had in the earlier seventh century; and being thus included within a comparatively limited space, lacked any minor enclosures of their own. As large-scale elements, they were, however, placed as far apart as possible, 236 Tempyō *shaku* on centers; and thus rose almost alongside the eastern and western cloister corridors (the whole cloister width, including corridors, being 376 Tempyō *shaku*). Either to obtain a greater courtyard area, or to avoid the shape of the Hōryūji type, longer in the transverse sense, the lecture hall was moved farther to the rear, in proportion to the space between "golden" hall and middle gate, producing cloisters slightly deeper than a square. In the north-and-south sense, the pagodas rose closer to the middle gate than to the "golden" hall. The great south gate here lay considerably closer to the middle gate than the distance between the latter and the "golden" hall. The last was situated at the exact center of the courtyard. All these dimensions, as given by remaining pillar bases, are the same at both Yakushiji sites. The "golden" hall was seven bays wide by four deep, 78 by 39 *shaku* in comparison to Hōryūji's 45.9 by 35.3. The remaining pagoda, three bays square, is 23.5 *shaku* on a side, as against 21.2 at Hōryūji; those of the original Yakushiji seem to have been a few inches larger.

⁸¹ As Adachi points out, the superfluity of the twin pagoda scheme is proved by the fact that at both Yakushiji sites, only a single cache of relics was provided for the two.

⁸² This design is recommended, as being that of the Jetavana monastery, in a compilation by the 7th century monk Tao-hsüan, the *Kuan Chung Ch'uang Li Chieh T'an Tu Ching* 關中創立戒壇圖經 (*Taishō-issaikyō*, no. 1892, pp. 82-4).

The ruins of a few other temples which took definite shape during the same general period show similar plan characteristics. Those of Hisodera 比蘇寺 are perhaps the clearest; and in addition to the typical twin-pagoda scheme of the later seventh century, have yielded excellent tiles of "proto-Nara" style.⁸³ The foundation is placed by many records in the Asuka period; perhaps because work was begun in an earlier style, the reconstructed plan seems closer in general relationships to that of Shitennōji than does that of Yakushiji. The whole cloister is a deep oblong, with a ratio between east-and-west and north-and-south dimensions of 1 to 1.4; almost the same as that of Shitennōji, as against the near square at Yakushiji. The pagodas, perhaps because they were smaller, only about 16.5 *shaku* on a side, were allowed to stand closer together, and thus seem to have fallen almost exactly on the quarter points of the total east-and-west cloister dimension. As at Shitennōji, again, the Kondō here lay well to the rear of the courtyard, instead of at the center.

In the case of Gubukuji 弘福寺, located outside the capital, Asuka, only the stones of an eastern pagoda remain; but other vestiges show that the same type of plan was followed.⁸⁴ Like Hisodera, this had been a foundation of the Asuka period, under the name Kaharadera 川原寺; here, however, the proportioning is closer to that of Yakushiji, with a Kondō moved to the south nearer the pagodas, and a large open area in front of the lecture hall.

In all of the above ruins, a study of dimensions proves that the so-called Tempyō foot was used, a standard based on that of T'ang China. This was equivalent to 0.975 modern *shaku*, in contrast to the "Koma" foot of early seventh century foundations, equal to 1.17 of the modern. This change appears, perhaps earliest in Japan, in Yamadadera, traditionally founded in 641.⁸⁵ The monastery remains today only in ruins, but seems to show a transitional stage between the "Asuka" type of Shitennōji, with a single, axial pagoda, and the developed layout of early Nara. The pagoda is single still, but the cloister area has been deepened, pushing the lecture hall to the rear so that a spacious area is opened in front of it.

THE NARA PERIOD (710-784); "TEMPYŌ":

The urge toward expansion perceptible in the early Nara monastery plan was carried to fulfilment in the first half of the eighth century, in the rush of building activity which followed the transfer of the capital to Heijō. The twin pagodas—in Yakushiji already pushed so far apart that they seem ready to burst through the surrounding corridors—were moved outside and in front of the cloister area. The lecture hall, which had been

⁸³ Hisodera, also known as the temple at Yoshino 吉野寺, was the eventual place of installation of the Buddha images made from a log of camphor wood found in the sea in 553 (*N-shoki*, Kimmei-tennō 14/5, Aston, p. 68). Traditions agree that some sort of religious establishment was founded on the site by Prince Shōtoku, but there is no good evidence for the date of erection of a formal monastery like that shown by ruins on the site today. Cf. Hattori, *Nihon-kenchikushi*, pp. 145, 169-70.

⁸⁴ *Ibid.*, pp. 143, 168. Cf. *Koji-ruien*, *Shūkyōbu* iii, pp. 1350-1. Traditionally erected in 655; mentioned, as Kawaharadera, in the *N-shoki* for Byakuchi 4/6 (653), as the temple in which icons were placed by Imperial command for the sake of the recently deceased priest Bin. 旻 (Aston, p. 244.)

⁸⁵ See above, note 49 and p. 26.

withdrawn farther and farther from the Kondō, was also at last separated from the cloister and placed—though on the same axis—well in back of its rear corridor walls; being enclosed, now, in a sort of rear court by the long U-shaped block of dormitories. Within the latter also stood the bell and *sūtra* pavilions.

An early and incomplete version of this final layout is seen in the remains of Kōfukuji, in present Nara (fig. 14). Transferred from the previous capital, this temple was begun again in 710 by the powerful Fujiwara no Fubito as one of the first in the new; and was finished by his descendants or the Imperial family during the next two generations.⁸⁹ Today, after repeated disasters, it retains no building earlier than Kamakura. Several from that age and later stand on the original sites, however; and these, with the remaining terraces and column bases and the evidence of old pictures, provide a fairly clear idea of the Nara period arrangement. The area of the monastery occupied a full four "blocks" square of the Heijō gridiron city plan, with the chief buildings placed in a rectangle one block wide and two deep. The main "golden" hall, built on a new large scale, nine bays by six, 124 *shaku* by 78, straddled the street separating these two blocks. Approximately two-thirds of the rear block was filled by the dormitory courtyard, of which the east and west wings ran along the street boundaries. Within this stood the lecture hall, nine bays by four, 142 by 62, with the bell and *sūtra* pavilions close to its front corners, and here only a narrow space between it and the rear of the "golden" hall. The latter closed off the rear of a spacious, unobstructed cloister area, now wider than deep, and 284 *shaku* by 222 overall. At the front of the cloister stood the usual middle gate; and a short distance in front of this was the great south gate, the two buildings being alike five bays by two, 78 by 28.

On a line half-way between the two gates, the eastern pagoda stood on the other side of the street in the adjacent block. The pagoda was erected 20 years after the beginning of work on Kōfukuji, by the Empress Kōmyō, and in this case, although

⁸⁹ The early architectural history of Kōfukuji is given in the *Kōfukuji-engi* 興福寺縁起, written in 900 (*D-n-bukkyō-zensho*, *Jishi-sōsho*, iii, pp. 320 ff.). "In the 2nd year of the reign of the Emperor Amemikoto-hirakasu-wake (i. e. Tenchi, 663), the cyclical year being 己巳, in the 10th month of winter, the Naidaijin (Fujiwara no Kamatari) was unable to rest peacefully on his pillow. His wife, the Princess Kagami, begged him, saying, 'Deign to build a monastery and to enshrine holy images therein.' The Naidaijin would not agree. Three times she begged, until he consented. Wherefore thereafter the erection of 'treasure halls' 寶殿 was begun at Yamashina . . ." (With the transfer of the capital to Nara, the Prime Minister Fubito in 710) "first conceived the idea of selecting the preeminent site of Kasuga on which to set up the monastery of Kōfukuji." The *Engi* is arranged as a sort of historical inventory; this preamble comes under the heading Kondō 金堂 (in some copies 食堂 "refectory" is written instead, but this, in the place of chief prominence, is certainly an error of writing). The date 710 is set beneath, as if to indicate the year of erection of this main Kondō. Presumably the accompanying cloister and gateways were built in this first operation. Of the other principal buildings, the *Engi* supplies the following data: east Kondō, erected in 726 by Emperor Shōmu on behalf of the Retired Empress Genshō, then in ill health; 5-storeyed pagoda, in 730 by the vow of Shōmu's consort, Empress Kōmyō (daughter of Fujiwara no Fubito); west Kondō, by the same in 734; lecture hall, in 745 by members of the Fujiwara clan; Nanendō (the octagonal hall balancing the pagoda, southwest of the cloister) in 813 by a Fujiwara; Hokuendō (the octagonal hall, to the northwest) in 721, on behalf of the recently deceased Fubito, by command of the Retired Empress Gemmyō. Cf. Sato, *Dainihon-kenchikushi*, pp. 80 ff. and plate 30; Hattori, *Nihon-kenchikushi*, pp. 219 ff.

occupying the position of a twin pagoda scheme, was the only one ever built. Whether a western was never intended, or merely was postponed, its site was occupied in 813 by the octagonal Nanendō, 南圓堂 and thereafter a strictly symmetrical scheme was impossible. This absence is the more surprising in Kōfukuji since the original scheme stressed bilateral symmetry elsewhere outside of the main group of buildings. Thus an eastern "golden" hall was erected, approximately on the north-and-south line of the later pagoda and on the east-and-west axis of the main cloisters, as early as 726, and a western was added to balance it in 734; these two were each seven by four bays, and 97 by 52 *shaku*, and stood facing each other.

The refectory and great bath-house are identifiable from pillar bases and a fifteenth century rebuilding, respectively, as occupying the block north-west of the central complex. The character of the former may be most readily explained by reference to Hōryūji, where a refectory of Nara style remains, in the same general position. As there, it was composed of two buildings close together on a north-and-south axis, a larger dining-hall proper, the Jikidō, at the rear, and a narrower Saiden 細殿 or Zenden 前殿 in front (fig. 8).⁸⁷

The general plan of Kōfukuji is noteworthy not only for its eighth century characteristics of pagoda and lecture hall position, and for its size in comparison with earlier monasteries, but also because it illustrates the growing complexity of elements considered necessary as a part of monastic building equipment. By the first quarter of the century, the number of major icon halls had here been increased to three, even the minor ones now being much larger than the one main hall of Yakushiji. In 721, again, as one of the earlier erections, a complex of a sort previously unknown was added at the north-west, balancing the refectory group: an octagonal hall surrounded by its own square of cloisters. This, then called the Endō (and from the next century renamed the Hokuendō, 北圓堂, "northern 'round' hall" to distinguish it from the other then erected on the south), was a sort of private chapel, since its purpose was to offer prayers for the future bliss of the temple's founder, Fujiwara no Fubito. A Kamakura rebuilding, of the hall only, stands today isolated among the trees of the Nara park.

The original appearance of the Endōin may be imagined by a further comparison with Hōryūji, where a similar compound was added in 739, well to the east of the monastery nucleus. The original octagonal building of this Tōin, "Eastern Precinct," the Yumedono (figs. 10, 27), still exists (although much altered by Kamakura restorations), and its courtyard surroundings suggest the colonnades which ran around it in the Nara period. The layout here was that of a small temple, rather more elaborate than was possible in more cramped quarters at Kōfukuji. Present remains and the evidence of an eighth century Tōin inventory⁸⁸ show that the octagonal Yumedono originally stood at the middle of a

⁸⁷ Jikidō and Zenden—respectively 120 by 57, and 120 by 30—are listed in the inventory of Kōfukuji buildings given by the early 11th century *Shōji-engishū* (*D-n-bukkyō-zensho*, *Jishi-sōsho*, ii, p. 15). The buildings standing on the site in the 19th century were pulled down in the Meiji era, when Kōfukuji was temporarily secularized; today only column bases of the Jikidō proper, in 8th century style, remain. I have been unable to find any early reference to the date of erection of the refectory complex, but it is commonly believed that it dated from the first building operation, after 710.

⁸⁸ The *Hōryūji-tōin-engi-shizaicho* 法隆寺東院緣起資財帳 of 761. Quoted in Sato. *op. cit.*, p. 100.

colonnaded compound 140 Tempyō feet north and south by 134; a little deeper than a square since its front was occupied by the projecting mass of a middle gate. Outside the cloisters to the rear, the precinct had its own lecture hall, 84 by 36. A small south gate opened at the front. Elsewhere, probably to right and left of the main block, were three subsidiary buildings and two dormitories.

A detail of particular interest is given in this inventory of the Hōryūji Tōin, which the early date of the text—761—makes the more valuable as historic evidence. In the principal complex of Hōryūji and in other main buildings of the Asuka and Nara periods, the roofs were invariably of tile, after the Chinese fashion. In the subordinate Tōin, on the other hand, only the Yumedono, the lecture hall, and the dormitories were tiled, the other elements being specifically recorded as having roofs of cypress shingles. The latter was then the highest class indigenous Japanese technique of roofing, as it has remained to the present; in the eighth century cheaper and more readily available than tile, and certainly because of its lightness less troublesome in roof construction. This tendency to retain traditional methods, in places of minor importance, in the full tide of Chinese influence, was by no means confined to the Hōryūji Tōin. The inventory of the great Nara temple of Saidaiji 西大寺, made shortly after its completion in the 770's, shows a very extensive use of native roofing methods, shingles, thatch, and planks, in all but the principal buildings of the layout and even in subordinate halls of worship corresponding to the Yumedono.⁸⁹ The researches of Sekino M. and Fukuyama 福山 again, have proved that three buildings of some importance in the monastery of Ishiyamadera 石山寺 at the mid-century, one of them the lecture hall, which before being dismantled and transferred to that site had formed part of the mansion of the high minister Fujiwara no Toyonari 豐成 were constructions of a purely Japanese style, roofed with planks.⁹⁰ We know further, from the complaint of the Council of State of 724 which I have quoted earlier, that at that date the capital, for all its ambitious Chinese metropolitan plan, had retained traditional building methods even in the residences of the nobility; and that far too few who were capable of maintaining such establishments had built themselves homes in the Chinese style of tiled roofs and red and white facades which was proper to the dignity of the Imperial surroundings. All this evidence goes to show that the imported fashion imposed upon the Japanese from above even at its height of influence failed to penetrate beneath the upper layers of national habit. A Muromachi period picture of the then existing Kōfukuji shows many of its elements roofed with shingles, even those of first importance like the great south gate and the east and main "golden" halls.⁹¹ Much of this may well have been due to later rebuilding, at a period of diminished Chinese influence (granting that the picture has any accuracy). But it seems likely that at Kōfukuji also such minor buildings as the corridors around the octagonal hall and those which enclosed the pagoda and eastern Kondō, were from the start shingled as they are shown in the painting.

For plan of present Yumedono complex, cf. Masuyama, *Nihon-shaji-kokenchiku-kanshiki-shiryō*, p. 60 (hereafter referred to as *N-shaji-shiryō*).

⁸⁹ See below, pp. 59 ff. and note 98.

⁹⁰ Cf. Sekino M., in *Hōun* xx, August 1937, pp. 15 ff.

⁹¹ The so-called "Kasuga-jinsha-shaji-mandara" 春日神社社寺曼陀羅 a *kakemono* belonging to Kōfukuji and housed in the Nara Museum.

The monastery Gangōji, backing against Kōfukuji across the Sarusawa pond, occupied a like area and was generally similar in arrangement.⁹² Resemblance carried even to the same asymmetry of pagodas. Here also the major one of five storeys was on the east, and in this case was apparently balanced by a smaller, octagonal pagoda of two storeys.¹⁰⁴ In other Nara temples of the first class, Daianji,⁹³ Shinyakushiji,⁹⁴ Akishinodera 秋篠寺,⁹⁵

⁹² See section on Gangōji in *Kōji-ruien*, *Shūkyōbu*, iii, pp. 1226 ff. This temple was the successor, at Nara, of Hōkōji, founded by the Soga clan at Asuka at the end of the 6th century. A *Shoku-nihongi* entry for Reiki 2 (716) states that at that time "the transfer of Gangōji to the 'left-hand' of the capital was begun." Another, for 718, states that it was moved to the new capital. An early inventory is given in the *Shoji-engishū*, here stating that it was begun by Empress Gemmyō in 709. Discussed by Sato, *op. cit.*, p. 97, and Hattori, *op. cit.*, pp. 223 ff., figs. 65-6.

⁹³ A "history and inventory" of Daianji remains, compiled in 747 in compliance with the same general order which produced Hōryūji's. (*D-n-bukkyō-zensho*, *Jishi-sōsho*, ii, pp. 114 ff.) First established as Kudara-no-ōtera, by a last wish of Shōtoku (see above, p. 30, and note 56); later moved, and renamed Daikandaiji 大宮大寺, in 674, to be one of the monasteries most greatly favored by the Imperial house in the later 7th century. The somewhat later *Daianji-engi*, of 895, states that it was transferred in 710; that Emperor Shōmu, respecting the position which it had held in the esteem of his predecessors, pushed its construction forward in answer to the request of the priest Dōji-risshi 道慈律師, made in 729; that the latter, placed in charge of the work, took as his model the design of the great monastery Hsi-ming-sū 西明寺 in the T'ang capital Ch'ang-an (which in turn had copied the Jetavana Vihāra, as the latter had imitated the palaces of the Tūṣita Heaven). Cf. *Kōji-ruien*, *Shūkyōbu*, iii, pp. 1215 ff.; and on Hsi-ming-sū, p. 65 below. The 747 inventory includes:

"Gateways, nine. Two Buddha gates, provided with images of the Heavenly Kings, the Kongō-rikishi Protectors, Bonten, Taishakuten, Hashitoku-ō, Bipashira-ō. Seven priests' gates.

"Halls, three. Kondō 180 by 80, pillar height 18; lecture hall 146 by 92, pillar height 17; refectory 145 by 86, pillar height 17.

"Two-storeyed pavilions, two. *Sūtra* pavilion, 38 by 25; bell pavilion the same.

"Cloister courtyard, one . . . (etc.)"

The pagodas are not mentioned, and doubtless were not yet erected by 747. Daianji seems to have been a preliminary experiment, in design and scale, for the climax at Tōdaiji. Cf. Sato, *op. cit.*, pp. 98-9; Hattori, *op. cit.*, pp. 228-9.

⁹⁴ Founded by Empress Kōmyō, who erected a 9-bay Buddha hall and "two pagodas, symmetrical on east and west" 東西相對 (so the history of Tōdaiji, *Tōdaiji-yōroku* 東大寺要錄, the earlier portions of which were probably written at the same time as a preface dated 848). In 780, the *Shoku-nihongi* notes that Shinyakushiji was struck by lightning, and Kondō, lecture hall, and west pagoda were burned down. The *T-yōroku*, iv, for 963/3 records the re-erection of the main hall—there called the hall of the Seven-fold Yakushi 七佛藥師堂—which with other buildings had been blown down by a typhoon. Cf. Sato, *op. cit.*, pp. 102-3; Hattori, *op. cit.*, p. 239. Sources quoted in *Kōji-ruien*, *Shūkyōbu*, iii, pp. 1233 ff. The existing main hall, enshrining a single Yakushi, is apparently the result of a re-erection at that time. Since its style and details conform to the 8th century rather than to the 10th, Hattori suggests that it was simply set up again after the typhoon, the majority of the timbers being still usable; and that it dates, therefore, some time (presumably a decade or so) after the fire of 780. The Shōsōin preserves a pictorial record of Tōdaiji properties, made in 756, which in very abbreviated form shows a main hall of the same general type, with single eaves. See below, note 118.

⁹⁵ The *Akishinodera-engi* of 1139 (*Kōji-ruien*, *ibid.*, pp. 1271-3) states that the monastery was established by the vows of the Emperors Kōnin (r. 770-80) and Kammu (781-805), its first dedication being in 780 and its founder the priest Zenjū-daitoku 善珠大德, the younger brother of Emperor Shōmu. The *Engi* describes the early buildings only in poetic style, but the sites of the two pagodas are clearly discernible today. Cf. Hattori, pp. 243-4, Sato, p. 105.

and probably the nunnery Hokkeji, 法華寺,⁹⁶ symmetrical pagodas existed, in addition to the other features of the mature plan. Triple "golden" halls were not inevitable, being absent at Tōdaiji; on the other hand they might appear in an establishment at so small a scale as Kairyūōji,⁹⁷ where the buildings were of no more than Asuka dimensions.

Descriptions, and pictures from the Muromachi period on, show that in such designs as a general rule the main Kondō was emphasized by a double roof, as the element of greatest importance, while the lecture hall (as at Hōryūji) and side "golden" halls were single-storeyed. The late-erected Saidaiji,⁹⁸ which seems to have shown in decoration at least a more advanced style than its predecessors, reversed this practise, making the rear hall the two-storeyed one. The change was perhaps a reflection of a later T'ang fashion than that imitated in the early eighth century. With respect to the two main gates on the north-and-south axis, the earlier practise (proved for Hōryūji by its eighth century inventory) had been to make these approximately the same size. This tradition was retained at Kōfukuji, where the two, set up in the first building operation from 710 on, were of the same dimensions. An old picture of the later Daianji, however, shows the great south gate much larger than the middle gate; and this contrast may be seen today, in later rebuilding on the original pillar bases, at Tōdaiji.

The culminating effort of the Nara period toward size and magnificence was made at the mid-century at Tōdaiji,⁹⁹ to provide a worthy setting for the colossal Rōshana-butsu.

⁹⁶ Originally named Hokke-metsuzaiji 法華滅罪寺 "the temple of Sin-extinguishing through the Lotus Sūtra." It was probably first established in 741, as the representative for Nara of the provincial nunneries whose erection had been commanded by Emperor Shōmu. The *Shōji-engishū* names Empress Kōmyō (died 760) as its founder. The mid-15th century pilgrimage record *Nanto-shichidaiji-junreiki* speaks of it as possessing two pagodas—probably 8th century originals, since the fashion for such equipment waned soon after the abandonment of Nara as capital. Hattori, pp. 239-40, Sato, p. 101.

⁹⁷ Also known as Wakidera 脇寺, or Kadodera 角寺, or Sumiin 隅院. The *Shoku-nihongi* records a donation of a sustenance fief of 100 households to Sumiin in 738/3 (which proves its existence at that time). Temple tradition embodied in late gazetteers states that it was made a monastery in 731 at the wish of Empress Kōmyō, Hattori, p. 271, Sato, pp. 99-100. See below, p. 75.

⁹⁸ An early history and inventory exists, the *Saidaiji-shizai-ryūkichō* 西大寺資財流記帳, written in 780 (*D-n-bukkyō-zensho*, *Jishi-sōsho*, ii, pp. 157 ff.). Here it is stated that the monastery was built as the result of a vow made in 764 by Empress Kōken, and was dedicated the following year after the casting of its main icon. For the list of buildings given, see below, p. 59, also notes 103, 104. Hattori, pp. 241 ff.; Sato, pp. 103 ff.

⁹⁹ The early history of Tōdaiji is very well documented, as befitting its unique importance. (Cf. *Kōji-ruien*, *op. cit.*, pp. 1099 ff.) Emperor Shōmu in 743/10/15 vowed the casting of a colossal image of Vairocana Buddha. The undertaking was begun in Omi Province in the vicinity of an Imperial palace, the Shigaraki-no-miya 紫香樂宮, to which the Emperor repaired to witness its progress. In 745 he returned to Nara, however (at this time the Imperial House seems to have been ready to transfer the capital to a new site, but abandoned the idea through political and religious pressure). In 745, therefore, the project was transferred to a site just below the eastern foothills of Nara, occupied in part by a small temple called Konshōji 金熟寺 which had been founded some time previously by priest Ryōben 良辨. The casting of the image was begun in 747; its completion—expedited by the fortunate discovery of a large amount of gold in Mutsu Province, sufficient to gild the bronze—was in 749/10/24; and dedication took place with all possible pomp in 752/4/9. According to the *Shoku-nihongi*:

"The great Buddha image of Rōshana was completed (by the ceremony of) eye-opening. On this day there was an Imperial Progress to Tōdaiji. The Empress (Kōken) in person, at the head of the Hundred

The site allotted for its buildings, eight blocks on a side, was the same size as that of the Imperial Palace enclosure of Heijō, and gave it an area four times the size of that of Kōfukuji. In this great park, all distances could be on a common scale of magnitude (fig. 15). The two main gates were widely separated, instead of being crowded together as at Kōfukuji. The twin pagodas, now seven storeys tall and including the spire approximately 325 feet high (more than three times the height of Hōryūji's) were given the importance of independent major monastic units, each possessing its own surrounding cloister colonnade with gates on the four sides. The main cloisters, instead of ending against the "golden" hall as a rear wall, continued northward to enclose it in a great oblong courtyard. Short corridors connected this main colonnade with the ends of the hall, and at the rear with the south ends of the priests' dormitories. The latter were developed

Civil and Military Bureaux, held a great maigre feast, with one and the same usage for all. On the first day all of the Fifth Rank and above wore robes of ceremony, while those of the Sixth and under bore their proper colors. The monks invited numbered ten thousand. Moreover there were brought together both the Office of Ceremonial Music and all the various sorts of music provided by the several temples; furthermore, princes, lords, and gentlemen performed the Gosechi 五節, the Kumemai 久米舞, the Tatefushi 楯伏, the Tōka 踏歌, the Hoko 袍袴, and other songs and dances, so that voices resounded from east and west, coming from different parts of the courtyard . . ."

The Tōdaiji Kondō, spoken of always as the Daibutsuden 大佛殿 or "hall of the Great Buddha," had been substantially completed in 751, although its full decoration necessitated several more years. The rest of the monastery was raised during the same general period.

It may be of interest to trace the vicissitudes suffered by these great buildings, as well as to note their sizes (given in the Tang-Tempyō shaku).

Daibutsuden: according to a contemporary description recorded in the 12th century *Chōya-gunsai* 朝野群載 (*Koji-ruien*, p. 1125): "double roof, 11 bays; height 156 feet, length east to west 290 feet (the text says 390, by error), depth 170; the platform 7 high, 327 by 206; 84 columns, 16 doorways, . . ." Burned down in 1180 as a reprisal, during the wars between the Taira and the Minamoto, by a Taira army; re-erected from 1186 to 1195, with Minamoto aid, in the new "Indian style" of architecture, but on the old plan (see below, pp. 211 ff. and note 366). Burned down again in 1567 by the feudal lord Matsunaga Hisahide; rebuilt in its final form (using only 7 of the original 11 bays) between 1696 and 1708. The record—only two serious fires in 1200 years, and both set by man deliberately—suggests that a building on such an enormous scale was protected by its very size against the more usual accidents, fires set by carelessness or lightning. The rapidity of the first re-building—in which the prestige of the Minamoto was involved—contrasts with the century or more during which the great Buddha sat in the open air, in the period when the older sects were almost without patronage.

Lecture hall: according to the *Tōdaiji-yōroku*, 182 by 96 (*Koji-ruien*, p. 1130); 11 by 6 bays, according to its remaining column bases. Burned in 917, restored in 935; involved in the Taira arson of 1180, rebuilt in 1237; burned again in 1567 and never re-erected.

East pagoda: according to *Chōya-gunsai*, 7-storeyed, height 238.7 ft., plus a spire of 88.2. Several times repaired during Heian; destroyed 1180, re-erected in the 13th century, burned again, by lightning, in 1362, never attempted thereafter.

West pagoda: *Chōya-gunsai* says height 236.7 plus spire. Destroyed by lightning in 934, again in 1000; probably also in holocaust of 1180. Re-erection begun in 1275. Final destruction date not certain, perhaps in mid 14th.

Great south gate: twice blown down, in typhoons of 962 and 989; re-built in 1163; burned 1180; re-built, on old plan, in 1199, and still standing. Five bays by two, 103 by 36.4 (modern shaku). See also pp. 211 ff., below.

Cloister court: recorded (in Tempyō foot) as 652.5 N. to S., 546.9 E. to W. In re-building of early

to a complication unparalleled elsewhere. Instead of the simple U-shaped block of earlier practise, there were here two, running parallel one inside the other; between them were spaced 22 small buildings, perhaps used for storage of necessities. Corridors linked this great dormitory mass to the lecture hall which it enclosed, and continued eastward to connect with the refectory; the latter now being a compound in itself, with its own courtyard and front gate, and minor assembly halls behind. The important corridors were double passages instead of single; e.g. that surrounding the main courtyard consisted of two parallel colonnades with a partition between.

The increase in scale of monastic establishments from early Asuka to this culmination at the mid eighth century may be best understood by reference to a schematic comparative plan of the principal four, Hōryūji, Yakushiji, Kōfukuji, and Tōdaiji (fig. 16).

Only piecemeal impressions can be gained today of the layout of even single monasteries of the Nara period; much less any idea of the magnificence of the whole capital in its century of prosperity. At Tōdaiji, something of the original relationship of great south gate and main cloister compound is still preserved. But the first dates from Kamakura, and the latter collectively from Edo; the Great Buddha hall, Daibutsuden 大佛殿, is now only two-thirds its former length, and the cloisters stop against it instead of continuing to the rear. Both pagodas, and all the rear complex of dormitories, refectory, lecture hall, pavilions, etc., have disappeared. At Kōfukuji many buildings stand on the old column bases and platforms, but so many important elements are missing—the main gates, all the

18th, portion to rear of Daibutsuden was omitted (since neither lecture hall, dormitories, nor refectory were re-erected).

The spirit of emulation which gave much of the motive power to Nara expansion, is illustrated by an anecdote concerning the Daibutsuden, given in the *Tōdaiji-yōroku* in its account of the arrival in Nara of the great Chinese missionary Chien-chên 鑑真 in 753 (the year after the dedication). The party of Chinese monks and their escort were met at the city gate by court officials and a great throng of Japanese monks, and were led to Tōdaiji. " 'Bishop' Ryōben (abbot and chief clerical actor in the construction of the temple) escorted them to do reverence in front of the Great Buddha, saying: 'This image has been cast of gold and bronze by the Most Imperial Retired Emperor, at the head of the whole nation, all uniting the merits (to be obtained by the deed). Seated, its height is 50 feet, in *shaku* measure.' Then he questioned them: 'In T'ang, is there anything at all like this great image?' Enkyō 延慶, chosen to answer him, said, 'There is not.' They once more bowed down, made offerings, chanted hymns of praise, and made a *pradaksina*" (*T-yōroku, Daiwajōden* 大和尚傳). The *Yōroku* in this section has preserved all that it left of a biography of Chien-chên, written by one of his disciples, the Chinese Ssū-t'o 思託 (who died in 805). The incident, curiously enough, is not mentioned in the other biography, fully preserved today, the *Tōdaiwajō-tōseiden* 唐大和上東征傳 by the Japanese disciple Genkai 元開, written in 779. It seems to me not impossible that its appearance only in a history of Tōdaiji may mark it as the interpolation of a Tōdaiji editor, moved by pride rather than by any strict desire for truth. The same instinct marks certain aspects of Japanese scholarship today.

Cf. Hattori, pp. 233 ff., Sato, pp. 121 ff., pls. 31-2. The standard monograph on Tōdaiji is that published by Amanuma in *Kenchiku-zasshi* 283. The plan reconstructions given therein have won general acceptance. Most of the original monastery is traceable today through remaining column bases, the dimensions of which check with those given in old records. The one important complex of which no concrete trace remains is the Refectory; for this, see below, p. 78 and note 128.

A map of the monastery precincts dated 756/6/6 has been preserved in the *Shōsōin* (*Tōei-shūkō* 東瀛珠光, iv, pl. 204, Tōkyō, 1927). This shows the main courtyard, with the Daibutsuden at its center, and the sites of the two pagodas in front. The other buildings had presumably not yet been set up.

corridors, dormitories, lecture hall, refectory, pavilions, etc.—and the present diminished nineteenth century Kondō is so lamentable as a focus of attention, that the whole effect is one of incoherence.

At Tōshōdaiji the combination of “golden” and lecture halls may be studied in the original buildings, but without most of their original surroundings, and no pagoda.¹⁰⁰

¹⁰⁰ Tōshōdaiji was erected to serve as the center for the new monastic discipline introduced into Japan by the celebrated Chinese master Chien-chên (see note 99). Special sources for the career of the master are the two biographies cited in note 99: the *Tōdaiwajō-tōseidon*, complete in one book, written by the Japanese disciple Genkai in 779; and the remains of a presumably longer biography in three books by the Chinese disciple Ssū-t'o, the *Daiwajōden*, written at approximately the same period as the other, but now preserved only in the small portion quoted by the *Tōdaiji-yōroku*. Genkai's work (*D-n-bukkyō-zensho*, *Yūhōden-sōsho* i, pp. 109-29; translated by Takakusu in *BEFEO*, 28-9, 1928-9) tells first the remarkable story of Chien-chên's unsuccessful attempts to reach Japan from 743 on; 11 years of wandering with his disciples through the coastal regions of south China and of voyages which ended always in disaster, until the aged master lost his sight, as a result of the hardships suffered. A sixth expedition was finally successful in 753, when the invitation to visit Japan was renewed by official envoys from the royal court. Chien-chên with his Chinese and Japanese followers and a carefully chosen cargo of religious paraphernalia reached Nara at the end of the year, to be received with great enthusiasm and the deepest reverence, and to be lodged at the monastery most fitted to the master's importance, the newly dedicated Tōdaiji. In 754/5, according to both biographies, Chien-chên received from the ex-Emperor Shōmu an expression of deepest gratitude for his coming, and a request that he complete Tōdaiji by the erection of an altar of ordination, Kaidan 戒壇. In the 4th month the altar was set up in front of the Daibutsuden; and the vows were administered first to the Imperial family, then to some 440 others, and finally to more than 80 priests who had already been ordained by a previously used ritual, but wished to subscribe to the new. Later an Ordination Precinct, Kaidanin, was established west of the Daibutsuden (where its name already appears in the Tōdaiji map of 756; see note 99 above). For a few years Tōdaiji remained the only place at which orthodox ordination by the new ceremony might be held. Then it was decided to divide the function into four; one altar to remain at Tōdaiji; one to be granted to Kanzeonji in Kyūshū, to take care of the south-west; a third to go to Yakushiji in Shinano Province as a center for the northeast; and a fourth to be established in a new monastery, expressly designed to house the master himself, at Nara. The biographies (and also the *Shoku-nihongi* for Tempyō-hōji 1/11/28 [757]) state that in 757 a sustenance fief of rice lands, about 250 acres, in the province of Bizen, was allotted to the master. (The *S-nihongi* actually says that the allotment was made to the “Tang Dhyāna Precinct” Tōzenin 唐禪院, of Tōdaiji, but this seems to have been Chien-chên's residence before Tōshōdaiji was erected; everything in the official notice corresponds with the biographies except the day, given as the 28th instead of the 23rd. Cf. Kobayashi 小林, “Sur l'érection de Kondō de Tōsyōdaizi” [in Japanese], *Tōyō-bijutsu*, Jan. 1933, number on Nara period, ii, p. 62). The disciple Genkai's account continues:

“The master wished to build a monastery (with the products of) these fields. An Imperial order granted him a garden site which had been the residence of the Imperial Prince of the First Rank, Nittabe. Fushō 普照 and Ssū-t'o (the two disciples, Japanese and Chinese respectively, who had followed Chien-chên on all his travels) begged the master to erect a monastery in this place, in order that the *Vinaya-pitaka* in Four Sections . . . (etc.) might be transmitted there for all time, and that the protection of the realm might be assured through the scrupulous observance of such precepts. The master gave his approval, saying ‘Very good.’ In Tempyō-hōji 3/8/1 (759) the master himself gave the monastery the title Tō-ritsu-shōdaiji 唐律招提寺 . . .”

This date, 759, has been commonly accepted as that of the erection of at least the nucleus of Tōshōdaiji. In recent years, the orthodox position has been attacked by Fukuyama 福山, especially in his “Étude sur l'époque de l'érection de Tōsyōdaizi” (in Japanese), *Tōyō-bijutsu*, Jan. 1934, number on Nara period iii, pp. 202 ff. Fukuyama believes that the accounts given in the biographies of the honors paid to Chien-chên

In one place alone, Taimadera, in the southern end of Yamato, do the twin pagodas of the Nara fashion remain, in their eighth century forms.¹⁰¹ Here something more of the general appearance of a Nara period foundation has been retained, since "golden" and lecture halls, although dating from Kamakura, are in their original positions and seem close to the original style. Connecting corridors are lacking, however, and incoherence has come; not so much through disappearance or change of buildings, as by a sweeping back of Nature over the artificiality of a geometrical Chinese plan. The plain of Yamato ends, behind Taimadera, in mountains which at that point run roughly north-east to south-west. The temple's natural position would be one backing against this range and facing roughly east, to accommodate an approach from the plain. Instead, it faces south, by an obstinate adherence to the Chinese rule of orientation. Its front gate opens onto a small mountain valley, remote from any normal way of approach. This entrance may once have been used, as an inconvenient but at least orthodox means of reaching the sacred precincts; for many centuries, however, the real main gate has been on the east. Thus the formal approach which is the keynote of the Chinese monastery plan, and toward which the traditional main buildings face, has here been allowed to revert almost entirely to forest, and opens out only onto rice-fields. The two pagodas stand on small hillocks, almost invisible to each other and difficult to see in their entirety from any point of view, because of the trees around them. Taimadera is of interest, therefore, not only for what it has preserved but because it shows the incompatibility of the strictly oriented, symmetrical Chinese plan with

have been greatly touched up for propaganda purposes, and that their lack of authenticity is shown by conflicting statements and errors in detail. His conclusion is that no especial attention was paid to the master by the Imperial House and the Court, after his arrival at Nara; and that the construction of a formal monastery cannot have taken place until the 770's, after his death. His arguments, largely textual criticism, are too detailed to be noted in sequence here. One important point is his belief that the text of Genkai's biography, the *Tōseiden*, as it now stands is a combination of the 8th century original with the embellishments of some later editor; part of the additions being from the hand of the other biographer, Ssū-t'o, around 777-780 (because these portions contain statements to the latter's credit). He claims that all references to the founding of Tōshōdaiji belong to this added propaganda by Ssū-t'o; and that the name of the monastery does not appear in authentic history until a notice in the *Shoku-nihongi* for 776, which was probably the period of its construction (the citation records the allotment of a sustenance fief of 50 households in Harima Province, by his theory to be used for building expenses). Chien-chên lived until his death in Tōdaiji, and the establishment of the new monastery was due to a rift between his followers.

All of this builds up an elaborate conspiracy, on what seems to me rather slender evidence. It is difficult to see how any such wholesale perversion of the truth could have been written, with any idea of its acceptance, only fifteen years or so after Chien-chên's death. A detailed refutation of Fukuyama's points has been made by Kobayashi (*op. cit.*).

An inventory of properties is given in the *Shoji-engishū*, pp. 21 ff. Here are listed an east pagoda, apparently the only one erected, a Kondō, erected by the Chinese disciple Ju-pao 如寶 (see below, note 117); a *sūtra* repository; a bell tower; a lecture hall, previously part of the Heijō palace (see below, note 119); a refectory, etc. Hattori, pp. 240-1; Sato, pp. 131 ff.

¹⁰¹ Taimadera began its existence, according to tradition, as an establishment of Prince Shōtoku, Mambōzōin 萬法藏院 at Yamada village in Kawachi. It was transferred to its present site and renamed in the reign of Emperor Tenchi or in the 680's—no early records remain, and the later are confused and contradictory (cf. *Kōji-ruien*, *op. cit.*, pp. 1304 ff., *Shoji-engishū*, pp. 52-3). I know of nothing to explain the construction of a monastery in the developed 8th century style. Cf. Hattori, p. 306, Sato, p. 55.

anything but a level or gently sloping site; and illustrates one reason why the popularity of mountain temples in later Japan meant the almost complete abandonment of such formal restrictions.

Even in the Nara period, a few, exceptional places of worship were built on sites which made entirely impracticable their organization on the axial system used elsewhere. One of these, the famous pilgrimage center of Hasedera 長谷寺 in the pass between Yamato and Ise, may be seen in later re-building today, set out in picturesque irregularity on various stages of a steep mountain-side. Another, the ancient Myōrakuji 妙樂寺 on the hill-top of Tōnomine in the Yamato plain, seems to have been of the same sort, although only a Muromachi version of its original pagoda marks the Nara layout today. This temple, now transformed into the Shintō shrine Danzan-jinsha 談山神社, was founded at the end of the seventh century by a son of the great Fujiwara no Kamatari, the priest Jōe 定慧, as a sort of memorial chapel for his father. A history and inventory compiled for it in 1197, the *Tōnomine-ryakki*, 多武峯略記 describes the three principal early buildings as follows: a pagoda, erected in 679; a lecture hall, built south of the pagoda in 683; and shortly afterward a "golden" hall, built east of the lecture hall.¹⁰² Such a relationship had obviously nothing to do with formal rules of planning, and must have been determined by the character of the steeply sloping terrain. We shall see that in the early Heian period the introduction of the new sects of Tendai and Shingon gave a great impetus to the foundation of secluded mountain retreats of this sort, in large measure, apparently, as an ascetic movement in protest against the worldly magnificence of the great Nara monasteries.

Some idea of the complexity of a large, fully developed official monastery in the capital of the Nara period, may be gained from the inventory of Saidaiji, written in 780 shortly after its buildings' completion (and to be read in particular contrast with that of Hōryūji).¹⁰³ Dimensions are given in the Tempyō-T'ang foot.

"Yakushi 'golden' hall, one building: 119 by 53. On top of the roof at the east and west (ends of the ridge) stands one gilded bronze 'shoe-shaped' (acroterion) each, surmounted by a gilded bronze phoenix shape which produces sound by a bronze bell. At the center of the roof (ridge) is a gilded bronze 'burning jewel,' at the middle of which is a gilded bronze egg shape on a bronze lotus shape; all this being held by two gilded bronze lions, standing on a gilded bronze cloud shape. The roof is surrounded by 36 flame shapes, and is provided also with bronze tile-shaped corner-guarding (finials). The tile ends have bronze (caps) in the form of eight-petalled flowers, and the ends of the rafters (? 桶 for 構) have gilded bronze flower shapes with 36 petals, each (end) also possessing a bell.

¹⁰² See below, p. 168, and note 288.

¹⁰³ *D-n-bukkyō-zensho*, *Jishi-sōsho*, ii, pp. 157 ff.

蓋上東西金銅杏形各重立金銅鳳形各咋銅鐸蓋上中間金銅火炎一基中在金銅茄形居銅蓮花形令持於金銅師子形二頭踏金銅雲形又字上周廻火炎卅六枚并在銅瓦形角隄瓦端銅華形八枚桶端金銅華形卅六枚各着鈴鐸等又四角各懸鐸堂扇並長押在金銅鋪眩金等
彌勒金堂一基...蓋東西隄瓦端各在銅鐸枚金又兩端金銅龍舌十枚桶端各着金銅葛形又角各銅鐸堂扇并長押在金銅鋪眩金等

There are also bells at each of the four corners (of the eaves). The hall's doors and lintels are provided with gilded bronze bosses, etc. (?)

"Miroku "golden" hall, one building. Two-storeyed, 206 by 68. At the east and west (ridge-ends) of the roof are guarding tile ends, each provided with bronze (?) Also at the two ends are ten dragons' tongues in gilded bronze. Each rafter has a vine shape in gilded bronze, and each corner has a bronze bell. The hall's doors and lintels are provided with gilded bronze bosses, etc. (?)

"Double cloister corridors, one circuit; 1172 around, with 'eaves corridors' 軒廊 on east and west (i. e. leading to the eaves of the Yakushi Kondō).

"Middle gate, one building; 78 by 30.

"East and west flanking gates, two buildings; each 20 by 28.5.

"Middle great gate, one 'platform' 基; two-storeyed, with eight bells, 90 by 37.

"East and west two-storeyed gates, two 'platforms'; each 26 by 20.

"Pagodas, two 'platforms'; five-storeyed, each 150 high.

"Standards, six shafts 幢六株; provided with four gilded bronze phoenix shapes, of which two are broken; two shafts lacking phoenixes. Stout pillars, gilded bronze heads.

"Eleven-headed, Juichimen-kannon Precinct, Juichimendōin 十一面堂院:

Paired halls 雙堂, roofed with cypress shingles, two buildings, 115 by 105. Roof (ridge) heads provided with 28 dragons' tongues.

Middle two-storeyed gate, roofed with cypress shingles, 50 by 20.

East and west two-storeyed gates, roofed with cypress shingles, 20 by 20. Board flooring in both storeys.

Eastern cypress-shingled priests' quarters, 70 by 40.

Western, first, cypress-shingled priests' quarters, 70 by 40, board flooring.

Western, second, cypress-shingled priests' quarters, 30 by 16, board flooring.

Western, third, cypress-shingled priests' quarters, 45 by 16, board flooring.

Northwestern cypress-shingled apartments, 24 by 14, board flooring.

Southern cypress-shingled gate apartments, 33.5 by 20.

"Southwest Corner Precinct:

Middle cypress-shingled apartments, 53 by 25, board flooring.

Southeast cypress-shingled apartments, 56 by 18.

Eastern cypress-shingled apartments, 56 by 18.

Southern cypress-shingled apartments, 70 by 18, board flooring.

Western cypress-shingled apartments, 56 by 18.

Northwestern first thatch-roofed plank- (sided) storehouse, 17.6 by 16, 11 high.

Second thatch-roofed, log- (sided) storehouse, 16.9 by 15.3, 10.6 high.

Third thatch-roofed, plank- (sided) storehouse, 15.8 by 13.4, 10.6 high.

Fourth thatch-roofed, plank- (sided) storehouse, 17.6 by 14, 10.8 high.

“Southeast Corner Precinct:

- Southern cypress-shingled apartments, 44 by 20.
- Eastern cypress-shingled building used for storage, 50 by 16.5.
- Eastern cypress-shingled *Azekura*-type storehouse, 17 by 14.5, 10.6 high.
- Northeastern cypress shingled apartments, 45 by 16.
- Northwestern cypress-shingled apartments, 36.5 by 15.

“Four (Heavenly) Kings' Precinct, Shiōin 四王院:

- Paired halls, cypress-shingled, two buildings. Each 110 long, combined breadth 86. Roof (ridge) heads provided with 28 dragon's tongues.
- Southeastern tile-roofed quarters, 90 by 40.
- Southwestern cypress-shingled quarters, 90 by 40.
- Northeastern cypress-shingled quarters, 57 by 36.7.
- Another cypress-shingled small quarters, 56.5 by 16.
- Another cypress-shingled small quarters, 56.5 by 14.
- Cypress-shingled small apartments, 18 by 11.

“Small Pagoda Precinct:

- Cypress-shingled hall, one building, 70 by 40.
- Cypress-shingled 'narrow hall' (Saiden), one building, 70 by 20; also board flooring.
- Northern cypress-shingled quarters, 90 by 27.
- Another cypress-shingled small quarters, 90 by 12.

“Refectory Precinct:

- Tile-roofed refectory, one building, 110 by 60.
- Cypress-shingled hall, 100 by 40.
- Cypress-shingled double 'eaves corridors,' three buildings. Each 30 long; the middle 16 broad, the east and west each 14 broad.
- Tile-roofed great cooking hall, 90 by 50.
- Eastern cypress-shingled kitchens, 110 by 40.
- Tile-roofed building used for storage, 50 by 20.
- Western cypress-shingled kitchens, 110 by 40.
- Tile-roof building used for storage, 50 by 20.
- Tile-roofed paired *Azekura*-type storehouses. Each 23.5 by 18.4; the connecting space between them 22.8 long.

“Stables:

- Northeastern cypress-shingled building, 40 by 20, board flooring.
- Thatched building, 54 by 19.
- Thatched stable, 90 by 20.
- Tile-roofed stable, 64 by 12.
- Cypress-shingled, plank- (sided) storehouse, 17.2 by 13, 9.3 high.
- Cypress-shingled building, 50 by 20; board flooring.
- Cypress-shingled building, 47.5 by 26.
- Cypress-shingled bath-house, 50 by 20.

“Office Precinct. 政所院:

(I abridge hereafter. This complex contained three buildings listed as ‘cypress-shingled buildings’; two ‘cypress-shingled kitchens’; one ‘thatched kitchen’; one ‘cypress-shingled administrative hall’; one ‘thatched, plank-(sided) storehouse’ and two ‘cypress-shingled, plank-(sided) storehouses’).

“Storehouse Precinct Shōsōin 正倉院:

(This complex included: three ‘tiled-roofed *Azekura*-type storehouses’; three ‘cypress-shingled ditto’; four ‘tiled-roofed, plank-(sided) storehouses’ and one of the same type ‘used as a storehouse’; four ‘cypress-shingled, plank-(sided) storehouses’; one ‘cypress-shingled administrative building’; two ‘tile-roofed apartments with board flooring’; one ‘cypress-shingled apartments’; one ditto quarters; one ditto kitchen; and one ditto guest-house).

“Tiled Buddha Gates, three buildings:

Southeast, 30 by 20; northeast, ditto; southwest, ditto.

“Miscellaneous Apartments and Storehouses, nine buildings:

(These comprised: one tiled, *Azekura*-type storehouse; two ditto, one thatched and one plank-roofed; two ‘cypress-shingled apartments’; two plank-(sided) storehouses, one thatched, one shingled; one ‘board building’; one ‘thatched plank-(sided) building.’ The first four belonged to a Jōdōin 淨土院 or Pure Land Precinct).”

The several times mentioned “*Azekura*-type” storehouse was a form popular in the Nara period, whose most famous representative is the Imperial Repository, Shōsōin, in the Tōdaiji grounds. Its construction bears a rough resemblance to the log-cabin; but here the “logs” are wedge-shaped, and are fitted together so that contraction may open a crack between for the passage of air in the dry season, while in the wet they squeeze tight shut. The storehouse is raised on posts several feet above ground, to avoid damp (fig. 41).

Several points merit attention in the very long Saidaiji list. One is that its scale, although large for Japan, was still considerably less than that of Tōdaiji, erected a generation earlier and balancing it in the city plan of Heijō: a first sign of relaxation of effort, which in following centuries was to become more and more pronounced. A second feature rests on the doubtful authority of a map which accompanied the inventory, but may be proven incorrect in details. If its main elements are properly shown, however, it marks a change in the position of the two secondary halls of worship; which here are no longer tied as flanking elements to the main courtyard, but stand well in front (in the two precincts of the Heavenly Kings and the Eleven-headed Kannon), joined instead to the axes of the twin pagodas.¹⁰⁴ Such a prolongation of the north-and-south median line, with points of

¹⁰⁴ Cf. *Saidaiji-taikyō* 大鏡, Tōkyō, 1933, vol. i, pl. 49. This map, dated 1698, claims to be a copy of an 8th century original which accompanied the inventory. In details it is far from convincing, since it contains many later buildings, shown in the style of the Edo period. There is good reason to believe that such maps were more than once fabricated in late centuries, partly from written evidence and partly from imagination, to assist the temple in some dispute with a neighbor over land rights. A clear case of reconstruction based on imagination seems to be this map’s way of showing the two minor Saidaiji precincts. The

interest widely separated along it, seems a step toward the very long and narrow plan seen in certain later Chinese monasteries; as for example that of Lung-hsing-ssü 龍興寺 in Chêng-ting-hsien 正定縣, Hopei, which may have taken definite shape in Northern Sung or earlier.¹⁰⁵ This sort of plan, which becomes orthodox in the successive courtyards of large-scale Ming and Ch'ing establishments, is so far as I know unrepresented in Japan except (perhaps) here at Saidaiji.

inventory texts makes clear that in each precinct the main element was a unit called "paired halls," the same length and so close together that only a single depth dimension was necessary for the two. The design described is of great importance as a Nara prototype for the characteristic plan developments of Heian (see below, p. 78). The map, drawn up long after both "paired halls" had disappeared, shows them widely separated like a normal Kondō and Kōdō. It is possible that the position of these two precincts in the general monastery plan is drawn more correctly, since such information might have been more accurately preserved than the details of vanished buildings. Saidaiji today, huddled in the midst of rice swamps, is too sadly shrunken and altered from its original state to afford concrete evidence one way or another. The problem is complicated by the fact that the monastery—which fell into disuse after disastrous fires in the 9th century, and was revived only in the 13th—seems to have been radically modified in the process of rebuilding. There is a second Saidaiji map (*S-taikyō*, i, pl. 50), also of obviously late workmanship, which purports to show the precincts during Kamakura, in the form given them by their reformer, Eison 叡尊 (1201-90; honored as Kōshō-bosatsu 興正菩薩). Much of this seems the same complex of gates, cloister corridors, Buddha halls, dormitories, etc.; but there is a striking disagreement in the fact that only one pagoda is shown and that at the center of the main courtyard. The change thus implied is so drastic that the fact that this map shows the Four Kings' Precinct to the east of the courtyard, instead of to the southeast, may well have no bearing on the Nara original (the Juichimendōin seems to have disappeared).

The position of the Kamakura pagoda is sufficiently remarkable to demand some attempt at explanation. The map calls it a Tō-kaidan 塔戒壇, "pagoda altar of ordination," and in its honor calls the whole courtyard the Hōtōin 寶塔院, "Treasure Pagoda Precinct." It was unquestionably a new erection of the 13th century, on a site deliberately chosen in place of those of the old eastern and western pagodas. Now Eison, emerging from a conventional Shingon training, spent his mature life in an energetic attempt to revive the precepts of the much earlier Risshū 律宗, or Vinaya school of strict monastic discipline, which had flourished in the Nara period (in this, standing as a typical figure of the Kamakura renaissance). Much of his activity was concerned with proper methods of ordination to the priesthood, directed from Saidaiji as a center (so that the sub-sect which he founded is known as the Saidaiji-ryū 流; or because of its syncretic character, as the Shingon-risshū). In these ceremonies of ordination, the pagoda played an important part. The miniature, five-storeyed pagodas still possessed by Kairyūōji and Gokurakuin were used, presumably from the late 13th century, on such occasions in the latter temples, operating under Saidaiji's supervision (cf. note 144). For Saidaiji itself, Eison must have wished the ritual pagoda to be a full-sized one, so that it could serve as the actual ordination altar instead of an accessory merely. The unique favor which he enjoyed with several emperors in succession, and the gratitude felt by the state for his services in helping to repel the Mongol invasion by spiritual means, made it possible for him to carry out his architectural ambitions. Since the ordination ceremonies were the reason for Saidaiji's return to prominence, it was natural that they should be carried out on a dominant site within the temple precincts. Perhaps this factor alone was important enough to make Eison abandon both earlier pagoda platforms, and choose a new central position inside the courtyard. It may also be significant that in 1285 he received an Imperial appointment to serve as supervisor, *shummu* 主務, of Shitenōji, where the plan he adopted for his own headquarters had been in existence since the 6th century. Thus a full explanation for the reappearance of the "Kudara" layout in the Kamakura period, might involve both ceremonial necessity and a sort of antiquarian archaism; the latter not unusual in Eison's time, when the monasteries of the Nara region were being rebuilt. See his biography in the *Nihon-bukka-jimmei-jisho* 日本佛家人名辭書, Tōkyō, 1903, pp. 77-8.

¹⁰⁵ Liang Ssü-ch'eng 梁思成 "The Ancient Architecture of Chêng-ting Hsien, a Preliminary Report" (in Chinese), *Bull. of Soc. for Research in Chinese Archit.*, iv/2, Sept. 1933.

The inventory is also notable for the very great number of buildings which it lists as being roofed in the native techniques of cypress shingles, planks, and thatch. Particularly remarkable is the fact that the aristocrat among these methods, the shingle roof, was considered worthy of use even on the subsidiary icon halls, the "paired halls" of the Shiōin and Juichimendōin—whether from motives of economy or an ineradicable native preference, it is impossible to say.

One important detail of plan—the character of these same "paired halls"—will be discussed in the section dealing with the icon hall proper.

THE TWIN PAGODA PLAN IN KOREA AND CHINA:

A number of temple sites remain in Korea from the period roughly corresponding to early and late Nara, almost all reduced to the usual state of mounds and pillar bases. The great majority of these fall in the neighborhood of the modern Keishū 慶州, in the south-eastern end of the peninsula, important then as the capital of the dominant kingdom of Silla. The character of the evidence they present, in contrast to that of earlier Korean remains, is almost more interesting for its differences from the Japanese than for its similarities.

The twin pagoda layout, in its transitional phase with the pagodas still enclosed inside the main courtyard, appeared in Korea, from this evidence, at approximately the same time as in Japan, and there assumed very much the same form. The neighboring establishments of Sach'ŏnwangsa 四天王寺, Hamŭnsa 咸恩寺, and Mangdōksa 望德寺, completed according to historical records in 679, 682, and 684 respectively, are the earliest dated monuments of the type.¹⁰⁶ Another unidentified ruin, known only as the temple at Muhōri 末方里, seems from its similarity to belong to the same period.

So far as can be judged today, however, the developed plan of the late Nara period was never used in Korean architecture. In the famous temple, still existing, of Pulguksa 佛國寺, the two pagodas were built inside the courtyard as late as 752.¹⁰⁷ The same transitional form, finally, appears in the ruins of an unrecorded temple whose tiles bear the name Pumunsa 普門寺, which from the style of its stone and tile work is attributed by Professor Fujishima to the succeeding Kōli epoch (高麗, 918-1392).¹⁰⁷ In this conservatism, and in the scale of its building as well, Silla seems to have fallen well behind contemporary Japan. From the standpoint of adoption of Chinese fashions, this reversal is the more surprising since the kingdom from the mid-seventh century on became a vassal state of the T'ang, and thus in certain respects was subjected to direct Chinese influence. The greater energy and ambition of the Japanese overcame their handicap of greater distance and separation from China by a perilous sea passage, to achieve in the eighth century far more than their traditional rivals.

Surprising evidence of the comparative backwardness of eighth century Silla is furnished by the remains of a smaller temple in the Keishū region, Kamsansa 甘山寺.¹⁰⁸

¹⁰⁶ Fujishima, *op. cit.*, *Kenchiku-zasshi* no. 533, pp. 300-19, 1370 ff., 319 ff., respectively.

¹⁰⁷ *Ibid.*, pp. 1049 ff., 448 ff., respectively.

¹⁰⁸ *Ibid.*, pp. 1084 ff.

A statue unearthed here, of T'ang type and dated in 719 by the T'ang era K'ai-yüan 開元, states that the great lord who was its donor also erected the monastery. In spite of these evidences of contact with China, the establishment—probably because it was not connected with the royal family—seems to have still retained the old Eastern Wei foot as a basis of measurement. In the erections of the ruling house, the T'ang foot had been in use at least as early as Punhwangsa, founded in 634; this was naturally the standard in the later royal temples mentioned above, in the Keishū neighborhood.

The pagodas typical of Silla, built of stone at a comparatively small scale, had normally a geometrically logical position in the fore-court; half-way between Buddha hall and middle gate in one sense, and at the quarter points of the east-to-west axis in the other. In this they corresponded to the slightly earlier Hisodera in Japan, where the pagoda remains are also quite small. In no case were the pagodas pushed to the edge of the cloister courtyard, as was the case in the Japanese Yakushiji, as a first step toward freeing them entirely from the cloister limits.

Chinese evidence for the T'ang symmetrical pagoda scheme is even more unsatisfactory than for the single axis plan of the Six Dynasties. To the best of my knowledge, no vestige remains anywhere on the continent of a monastery layout comparable to that of eighth century Japan. According to tradition, the Nara establishment of Daianji—one of the first great achievements in the fully developed form—was erected in imitation of the celebrated Hsi-ming-ssū 西明寺 in Ch'ang-an;¹⁰⁹ presumably, therefore, the latter in the early eighth century possessed the characteristics of the Nara style. A clue is furnished by the T'ang painting history *Li Tai Ming Hua Chi* 歷代名畫記, by the ninth century Chang Yen-yüan 張彥遠, in a section (iii) describing the frescoes of the great Buddhist and Taoist establishments of the two capitals. At Ch'ien-fu-ssū 千福寺 in Ch'ang-an, there were both East Pagoda and West Pagoda Precincts. The architectural elements (an incomplete list, being mentioned only if they contained frescoes) included for the former a gate building and apparently an "eastern pavilion" 東閣; and for the latter, a "north corridor hall" 北廊堂 (presumably on axis at the back of the compound), the pagoda itself, a gateway 塔院門, and a western corridor. Presumably these two courtyards were set in symmetrical balance about the (later mentioned) Southern Precinct with its Buddha hall.

The records of the Shingon sect, again, state that its founder, Kōbō-daishi 弘法大師, paid a visit in Ch'ang-an to the Eastern Pagoda Precinct of Ch'ing-lung-ssū 青龍寺.¹⁰⁹ Ch'ang-an and Lo-yang were the goals of every Japanese traveller to the T'ang empire; and it is probable that the models for the Nara temples were chosen there, where T'ang prestige reached its greatest heights. The fashion imitated, being expensive and without any real religious meaning, may well have ruled only briefly, at Buddhism's period of greatest prosperity (which by coincidence was an age of close contact with Japan). As an expensive capital fashion, it may have prevailed widely only in the metropolitan districts; just as the Imperial style of Ming and Ch'ing, universally applied in the Peking area, seems to have had little hold even in adjacent provinces, and is flatly contradicted in the south.

¹⁰⁹ Frequently quoted: e.g., in the record of the transmission of the esoteric rite of "baptism" to Japan, *Dembō-kanchō-nikki* 傳法灌頂日記, i (Zoku-gunshoruijū, Shakkabū 26/1, p. 279).

By the same sort of provincial conservatism which preserved the archaic "Kudara" layout until the Liao, the monastery plan used in Yakushiji and then discarded in Japan was still in vogue in Su-chou at the beginning of Northern Sung. In the so-called "Twin Pagoda Temple" 雙塔寺, the two pagodas were erected, apparently for the first time, in 982.¹¹⁰ They stand fairly close together, with a ruined main hall about 50 feet on axis behind them; no traces of cloisters or gates have survived, but the scale of the remaining elements implies a layout like that of Yakushiji. At Ling-yin-ssü 靈隱寺 in Hang-chou, where the other buildings are of recent date, the main courtyard contains two miniature stone pagodas, on either side of the stairway to the terrace of the Buddha hall, which according to an old temple record were set up in the Five Dynasties period.¹¹¹ Although perhaps earlier in date, this is a later stage than that of the Su-chou version, since the pagodas have shrunk to vestigial scale.

In later Chinese Buddhist architecture, the pagoda—unless completely separated from the symmetrical layout of the courtyards—stands typically as a single element on axis, well toward the rear of the whole compound. The prototype of this solution existed already in T'ang, and may have acquired sufficient prestige to supplant the twin pagoda plan before the end of the dynasty. Thus a work by the celebrated Ch'ang-an priest Tao-hsüan (596-667), on the proper method of constructing an altar of ordination 戒壇, contains parenthetically a description of a monastery (supposedly the Jetavana Vihara) laid out on equally orthodox principles.¹¹² In this there are four large courtyards behind the middle gate. The first ends in a "front Buddha hall" 前佛殿. The second ends in a "rear great hall of Buddha preaching the Law" 後佛說法大殿 (the equivalent, probably, of the lecture hall); the seven-storeyed pagoda stands at the center of this second enclosure, with bell and sutra pavilions on either side of it.

THE ICON HALL

Consideration of the individual buildings which make up the temple architecture of Japan, has been limited below—in the study of plan and section which is the prime problem of every architecture—specifically to the hall which exists as place of worship of icons. I have done this not merely as a convenient means of limiting the scope of my study. In Japanese Buddhist architecture, the place erected as a house for the image of the god has at least since the Nara period far outweighed any other element in importance. At least until recent times it has received far more attention in building than any other, from donor and architect. The type makes up the great majority of remains in every period; it is the only one in which a consistent development can be traced, operating throughout the whole structure, from start to finish, and indeed the only one in which an organic development of any interest took place at all. The pagoda was standardized in the Nara period, and thereafter was merely repeated, with a few variations of detail and proportion according to the fashion of the time, until the twentieth century. Its plan and section are interesting

¹¹⁰ Liu Tun-tseng, "The Ancient Architecture of Soochow" (in Chinese), *Bull. of Soc. for Research in Chinese Archit.*, vi/3, Sept. 1936, pp. 36 ff.

¹¹¹ Tokiwa 常盤 and Sekino, *Buddhist Monuments in China* (*Shina-bukkyō-shiseki* 支那佛教史蹟), Tōkyō, 1926, v, pp. 90 ff., pl. 57.

at their formation, but only in rare cases thereafter and to a degree limited by the strictness of the formula. The gateway may be impressive in individual instances like the Nandaimon of Tōdaiji, but here again there was very little change throughout the whole course of Japanese architectural history except in visual details, and that which did occur was a reflection of developments undoubtedly brought about first in the Buddha hall. These elements, and others obviously minor like the *sūtra* and bell pavilions, remained static for over a thousand years because their purpose, largely ornamental and symbolic, was unaffected by any important changes in use. A gateway is primarily something to walk through or a symbol of protection, in any century. The icon hall, on the other hand, has been subjected to extreme changes in use, which by a process of organic growth have produced extreme variations in its form—that is, in its plan and section. It is these which are the first object of this study. I shall mention below, where chronologically appropriate, such alterations as did occur at one time or another in other architectural elements like the pagoda or gateway. In general, however, the latter will appear in the subsidiary sections devoted to the study of details, where their evidence is sometimes of importance. In such sections, again, I shall introduce evidence, where profitable, from the parallel development of Shintō shrines, which from an ornamental standpoint were closely linked to Buddhist building for many centuries.

(A general term like "icon hall" becomes necessary in dealing with Buddhist architecture from the Nara period on. The original name "golden hall" gradually passes out of use, and even the wider "Buddha hall" is too specific to include buildings which may now enshrine any kind of icon, chosen from an increasingly rich pantheon).

THE ASUKA AND NARA PERIODS' PLAN:

The earliest icon hall remaining in Japan, and the sole monument of the kind from the Asuka period, is the Kondō or "golden" hall of Hōryūji (figs. 5, 10, 17, 20).¹¹²

The building is five bays wide by four deep in plan. In section it is two-storeyed. In one sense the impression of two storeys received from the exterior is a false one; the upper storey, although it opens in latticed windows on the four sides and is provided with a balcony running all around, is quite unusable, without a floor and filled with structural members supporting the upper roof. On the interior only the smallest advantage is taken of this extra space above. The clerestorey which would have been a western architect's first idea is not attempted, and the ceiling of the hall merely rises to what would normally be the level of the second-storey floor. In another sense, however, it is legitimate to call the building two-storeyed, since its structural framing separates clearly into two tiers. In Japanese architectural terminology such a construction is carefully distinguished from another which at first sight, on the exterior, seems the same: that in which the upper eaves are supported by tall "clerestorey" columns rising all the way from the floor, and the lower eaves are merely a sort of porch pent-house—or *mokoshi* 裳階—added around the bottom. A closed porch actually exists in the Hōryūji "golden" hall, in addition to its

¹¹² Hattori, *N-kenchikushi*, pp. 97 ff.; Sato, *D-n-kenchikushi*, pp. 30 ff.; Amanuma 天沼, *Nihon-kenchiku-shiyō* 史要, Nara, 1927, pp. 24 ff., pls. 10-13; Amanuma, *Nihon-kenchikushi-zūroku* 圖錄, Kyōto, 1933, i, pp. 12-26; Masuyama, *N-shaji-shiryō*, pp. 34-7 (line drawings).

main elements as described above, with a light roof which is fitted beneath the wide overhang of the lower eaves. In design this seems clearly an afterthought, added to expand the interior of the hall at some later period when the temple's growth had made its original area too cramped for convenience. The details of the penthouse bracketing are those of the Nara period, and the change is commonly ascribed to this time. A reconstruction of the original would remove this *mokoshi* first of all, and then the highly ornamental props under the corners of the main eaves, added to prevent their collapse in the seventeenth century restoration; producing as a result a much simpler and more satisfactory elevation.

The interior of the main, original hall, five bays by four, consists of an aisle or *hisashi* (廂 or 庇) one bay wide running around a central area from which columns have been omitted. This central area, three bays by two, is entirely filled, to the line of the interior columns which surround it, by a platform about two feet high serving as an altar. In Japanese terminology, the interior space, serving as a sanctuary, is called the *naijin*, 内陣 and the outer the *gaijin*, 外陣 the two words meaning simply "inner" and "outer space" respectively. For convenience of reference, I shall refer to them hereafter, in plans comparable to that of Hōryūji, as "chancel" and "ambulatory."

The platform altar (called *Shumidan* 須彌壇 because it symbolizes Mt. Sumeru) is covered with a great number and variety of statues, ranging in date from those which were first installed in the building on its completion, to additions or substitutions made in the Kamakura period. The most important of these are ranged along the south, and face southward toward the orthodox front of the temple. A lesser number also face to the rear, along the north edge of the altar, however, and some—among these the famous Tamamushi shrine 玉蟲厨 (fig. 61) and the guardian Asuka period images of the Four Heavenly Kings—even face east and west. This stressing of all four directions is one of the most important features of the Hōryūji "golden" hall plan. The suggestion it gives of a focus of radiation is emphasized by the position of the altar, in the exact center of the interior, and by the lack of any sense other than pure circumference in the aisle which surrounds it. The hall itself, 45.9 modern *shaku* by 35.3, with a proportion therefore of about four to three, is not far removed from a square. Since it is four bays deep, the doors in the end wall cannot be in the center; but they are next to the center, in the third bay, and the east-to-west axis is restored by the end staircases of the terrace, which are placed exactly in the middle rather than opposite the doorways they serve. As the major images face southward, so there are three openings along the south facade, as against one for each of the other sides; here again, however, symmetry is restored by the staircases, which are the same width on all facades.¹¹³ In general effect, in comparison to later buildings, the emphasis on a southward orientation is less perceptible at Hōryūji than an opposing sense of centrality and radiation.

¹¹³ The existing Kondō staircases are not originals. The building stands on a 2-tiered stone platform; the colors of the two and their masonry are entirely different, and it is clear that the upper dates from the 7th century, while the lower was added probably at the period of repairs in the late 17th. The staircases correspond exactly to this lower tier in stone and method of laying. On the other hand, they must have replaced original stairs in the same positions, for the upper tier shows no sign of patching on either side.

The focus and its circumference are of course even more obvious in the five-storeyed pagoda (although the aisle here is not original, but was formed by the addition of a *mokoshi* pent-house around the base, at the same period as that of the hall). The plan here is a square, symmetrical about both axes; and the images, set in four compartments between the interior columns, face in the cardinal directions with equal emphasis (figs. 5, 10).

The sense of this ground plan merits attention for two related reasons. In the first place, centrality and radiation, as features of the earliest temple buildings of Japan, are never again as perfectly exhibited as at Hōryūji, being in later centuries more and more completely supplanted by the rival emphasis on front and rear. In the second place, as Hamada has shown, this sense seems a more than possible link to the sources of Buddhist art in Japan, and through these to a tradition as old as Buddhism itself.¹¹⁴ A striking parallel exists between the interiors of the Hōryūji buildings and those of somewhat earlier cave temples in China (whose design must have been strongly influenced by contemporary wooden architecture). The latter again are square in plan, or nearly so, and resolve into the same basic features of an ambulatory and a central focus of worship. The probably later Chinese type, closer to that of Hōryūji, makes this focus a four-sided shaft, rising to support the roof, with images either in relief on the surface or set in niches on all sides (fig. 18). The basic differences between a cave hollowed out of living rock and a building framed in wood, make any exact correspondence impossible; for this very reason, the similarities which exist are the more suggestive. In the caves of such a form at Yün-kang, T'ien-lung-shan, Kung-hsien, and Tun-huang, the carved figures on the central shaft correspond, in their "centrifugal" placing, to those which are installed on the Hōryūji platform altar, and even more closely to those in the four compartments of the pagoda. Those in relief around the enclosing walls of the caves recall the Hōryūji frescoes; even the painted wooden canopies which hang above the main icons of the "golden" hall are imitated in stone around the top of the cave shaft.

An apparently earlier stage of the same idea, found at Tun-huang and Yün-kang, uses instead of the shaft a square pagoda, rising to the cave roof and enshrining various images on its four sides (fig. 19). From this point the steps backward in evolution are clearly visible; first to the cave temples of India, in which the focus of adoration is a miniature *stūpa*; and finally to the original free-standing *stūpa* itself. The latter, seen as at Sāñcī in its early stage, differs from Hōryūji in a complete absence of icons, but agrees in the same fundamentals of radiation and circumference. The relic and the great dome which encloses it have no orientation; the four gateways on its cardinal axes are as impartial as the four axial stairs of the "golden" hall or the identical facades of the pagoda. The pathway around the *stūpa*, finally, needs only a translation into the rectilinear terms proper to wooden architecture to become the Japanese ambulatory. Both passageways, in their visual function of surrounding the focus, suggest vividly what must have been their primary use in Buddhist ritual. The most solemn ceremony of worship in Buddhist India was that of

¹¹⁴ Hamada, "Hōryūji no Kondō to Rokuchō 六朝 no Sekkutsuji 石窟寺," *Hōun* vi, June, 1933, pp. 3 ff. Examples of central shaft type: Tun-huang, caves 103, 111; Yün-kang, central section caves 6 and 11; T'ien-lung-shan, east cliff, cave 8; Kung-hsien, caves 2, 3, 6. Central pagoda type: Tun-huang, cave 120N; Yün-kang, east section, cave 1, etc.

pradakṣiṇa, the procession around the sacred relic or image. This rite was carried with Buddhism to China and Japan, with the weight not only of Indian tradition but of actual prescription in holy writings behind its use.¹¹⁵ Thus one of the most popular *sūtras* of early Buddhism in the Far East, in Japanese *Yakushikyō*, specifically enjoins the devout to such a practise as the climax of their worship of the Lord of Healing. Those who would pay due respect to Yakushi are directed first to make His image, and to set it up in a proper place, clean, ornamented with curtains and banners, and made pleasing by flowers and incense; and then, having properly purified their minds and bodies, to "go around the Buddha image to the right, playing instruments and singing hymns."

With modifications introduced by the various sects, the ceremony of circumambulation or *gyōdō* 行道 is still carried on in Japanese temples today, as a part of the most solemn ritual. Its practise is often mentioned in writings of the Nara period, and there can be no doubt of its existence as a natural element of worship from the first years of Buddhism in Japan.

It is certainly this ceremony which is most clearly suggested by the narrow four-sided ambulatories of the "golden" hall and pagoda. Other ritual performances are less readily imaginable, and must have been severely limited by the small space at their disposal. What these may have been—the whole character of religious services in the Asuka and Nara periods—can be worked out only in general outlines, from the lack of any precise contemporary description. For the practises often named, of *sūtra*-reading, hymn-chanting, etc., congregations of monks of any numbers must have been ranged around the four sides, by almost the same principle as that of the *pradakṣiṇa* or *gyōdō* except that one or more leaders doubtless were stationed in front of the principal icons on the south. In the Nara period Hokkedō, which as we shall see retains a century later most of the features of the Hōryūji plan, the ambulatory is provided with long benches at the present time for the major assemblies of the temple (figs. 21, 23). The smaller scale of Hōryūji, with barely five feet of clearance between the columns, has probably always made impossible any such semi-permanent seating arrangement, since benches or long mats of any size in its aisles would leave almost no room for motion; the monks may well have sat on the sort of small, individual cushion often seen in T'ang Buddhist paintings, which could be easily pushed aside or gathered up to clear the ambulatory for a procession. Similar cushions were perhaps provided for even the leaders on the south side. Elaborate ritual furniture seems first to have been introduced into Japan with the esoteric sects in the early ninth century, and certainly could never have been used in the cramped south aisle of Hōryūji. The furniture of the "golden" hall today is limited to a number of offering stands, placed conveniently on top of the altar platform in front of the images they honor, and a single raised *raiban* 禮版, or dais of worship, close to the platform in the center of the south aisle. A similar arrangement is likely to have been the original one, perhaps with a large cushion or mat in place of the solidly framed dais typical of later times.

It is inadvisable to begin the study of the Japanese icon hall in section—that is, from the point of view of construction—with the Kondō of Hōryūji. As we shall see, the crux of

¹¹⁵ Cf. under *Gyōdō* 行道 in Japanese Buddhist dictionaries: the large *Bukkyō-daijiten* by Mochizuki and the shorter by Oda 織田, and the *Mikkyō-daijiten* 密教大辭典.

the Far Eastern temple building is its roof. The Chinese monumental hall, whether in temple or palace, gives no sign of having changed in any primary feature of roof construction, and thus in section, from earliest times to the twentieth century. The Japanese hall, in contrast, has shown a development no less remarkable than the Chinese conservatism, so that a radical difference exists between the typical cross-sections of Asuka and Nara on the one hand, and those even of late Heian on the other. Unfortunately for the study of this evolution, the roof is the most perishable feature of Japanese architecture as well as the most important visually and structurally. This is particularly true in the case of shingle roofs, the average lifetime of which as an efficient covering varies from 30 to 60 years only; but the tile roof also has its allotted span, and beyond that must be renewed unless the building beneath is to suffer serious damage. It is safe to say that no temple or shrine erection even of Kamakura retains its original roof covering today. In the great majority of cases, such restoration has meant not merely the substitution of a new outer skin for the old, but a thorough re-framing of the whole roof by more modern methods. In all but a very few buildings, therefore, the cross-section has been more or less radically altered, and reconstruction of the originals must be carried out on the basis of the rare examples left structurally unchanged. The most important of these latter for early temple architecture is the Nara period portion of the Hokkedō of Tōdaiji, and it is with this building that my analysis will begin. The roofs of the "golden" hall and middle gate of Hōryūji probably retains most of their original features; but their thorough restoration at the end of the seventeenth century—obvious in exterior details—has produced a rather confusing framework, which could be used only after much explanation to introduce the subject (fig. 20).

The buildings, probably of the eighth century, which can be compared in use and importance to the Kondō of Hōryūji are: the original portion of the Hokkedō of Tōdaiji;¹¹⁶

¹¹⁶ The Tōdaiji Hokkedō—so called because its principal services are based on the *Lotus Sūtra*, *Hokkekyō*—has also been called the Fukūkenzakuin 不空羼索院, or Kenzakuin, or Kenzakudō, from the fact that its main icon is the Fukūkenzaku-kannon; its popular name is Sangatsudō 三月堂, derived from the date of its annual ceremonies in the 3rd month. Located some distance to the east of the main Tōdaiji courtyard complex, on the hillside, this building has until recently been accepted as pre-dating Tōdaiji itself, the supposition being that it was erected to be the main hall of the latter's predecessor, Konshōji, by priest Ryōben. (See note 99). An important dissenting opinion has been voiced by Fukuyama ("Questions on Hokkedō in Tōdaizi" [in Japanese], *Tōyō-bijutsu* xxi, July, 1936, pp. 39 ff.) as follows:

References to Konshōji show it to have been a temple of considerable importance. It seems to have existed as early as 692, when a *Ninnō-e* 仁王會, or ceremony based on the *Ninnōkyō* (Nanjiu 17) was held there. From 739 on, it served as the official *sūtra* writing place for the household of the Empress Kōmyō. With the institution of provincial temples in 741, its name was changed to Konkōmyōji 金光明寺, so that it might serve as the representative of the class for the home province of Yamato. In 742, along with the "Eight Great Temples" of the time, Daianji, Yakushiji, Kōfukuji, etc., it was ordered by the Empress to establish a periodical period of retreat, *ango* 安居, for the monks. In 743, a great reading of the *Konkōmyō-saishōkyō* 金光明最勝王經 (Nanjiu 126) was held there, to serve as the model for similar realm-guarding ceremonies held all over Japan. In 744 and 746, it was the setting for the impressive ceremony called *mandō-e* 萬燈會, the illumination of "10,000 lamps." On the latter of the two occasions, it was visited by Shōmu, his consort, and the Dowager Empress Genshō; 15,700 odd lamps were lit as an offering to Rōshana-butsu (whose image had just been begun), and several thousands of priests took part in praising the Buddha and in performing *gyōdō* about Him). All of these citations suggest that the

the Kondō of Tōshōdaiji;¹¹⁷ and the Hondō, or main hall, of Shinyakushiji.¹¹⁸ The dates of all three are disputed. The first is placed at various points in the second quarter of the

temple was a large one, whose needs could not have been met by the modest dimensions of the Hokkedō (about 55 by 43 *shaku* only.) The latter's icon seems always to have been the Fukūkenzaku-kannon, also; so that it could not have served as the main hall of a "provincial temple," in which the icon was Shaka, by Imperial decree.

A source which bears directly on the erection of the Hokkedō is the history of its annual ceremony, the so-called *Tōdaiji-sakura-e-engi* 東大寺櫻會緣起 quoted in the *Tōdaiji-yōroku* viii, and dated 846. The apposite section runs as follows:

"The great originator of this ceremony was the late 'Bishop' (Ryōben) . . . who in the Tempyō era (729-48) first made manifest the four forms of loving-kindness . . . He deigned to make an image of Fukūkenzaku-kanjizai-bosatsu, i. e., the icon in question, a standing figure more than 10 feet high. . . . Although the figure had been completed, its place of installation had not yet been fixed by divination. After several years had passed, this site was settled upon by divining, in the eastern part of the capital, at the foot of towering mountains. . . . To enshrine the image of Kannon, a great hall was erected. . . . The 'Bishop,' in Tempyō 18/3, the cyclical year being 丙戌 (746), in the presence of the Most Great, Most Sainted Emperor (Shōmu), the Empress Kōken, and the Imperial Consort Ninshō (Kōmyō) (in the midst of), all the majestic adornments of halls and pavilions (under), spread-out banners and canopies, set forth the matting of exposition of the Law, . . . From this beginning of the ceremony . . . to the present time, in Shōwa 13 (846) 101 years have elapsed; old in years, the ceremony still is ever young."

Fukuyama, however, believes this account a piece of literary fantasy; particularly from the fact that although the Kannon image must from the start have been associated with the flourishing temple of Konshōji, the *Engi*—as if ignorant of the latter's existence—speaks as if its finally chosen home had been in an almost virgin wilderness. Authentic records show that in 746/3, Ryōben actually had the *Hokkekyō* copied, so that the ceremonies in its honor may have first been held at that time; but there is no proof that they were housed in the Hokkedō at that time, as was the custom later.

The *Tōdaiji-yōroku* i, 本願章 states another possibility:

"Tempyō 5 癸酉, (733), the nobles founded the Kenzakuin for Ryōben, known as Old Konshōji."

This is quoted, doubtless on the authority of the *Yōroku*, in other, later works. The *Yōroku* in its historical inventory (iv, 諸院章) makes the equation: "Kenzakuin; named Konshōji, also altered to be known as Konkōmyōji," and here also states that it was founded 創建 in 733. Fukuyama attempts to discredit this date also. The author of the *Yōroku*, he claims, states in his preface that he has assembled for his work both the ancient records and the sayings of the elders. When the *Yōroku* makes an important assertion, it usually states the source. In this case, no source is given. Fukuyama believes, therefore, that the 733 date was based either on oral tradition (and hence is of little value), or on what seems to have been the author's only possible source of written information, the *Sakura-e-engi* quoted above. Here he imagines a mis-reading of the *Engi*'s text. Where the latter says "in the Tempyō era first made manifest, etc." 以去天平年始奉爲四恩, Fukuyama supposes that the *Yōroku*'s author read "at the outset of the Tempyō era, made manifest etc."; and wishing to make "the outset" more precise, chose arbitrarily the 5th year. I must confess that this seems to me an extremely tenuous argument.

The name "Kenzakudō" he has found for the first time among unimpeachable records, in an entry for 749 referring to *sūtra*-copying. The building itself is shown, apparently, in the Tōdaiji precincts' map of 756, as a single-storeyed hall with a hip roof, properly placed with reference to the Daibutsuden (cf. *Tōei-shūkō*, iv, pl. 204). *Sūtra*-copying records, again, show that in 748 Ryōben was involved in the copying of a *sūtra* devoted to Fukūkenzaku-kannon; and the title deeds of Iga Province for 766 speak of lands which since 749 had been the fief of the Fukūkenzaku-bosatsu.

All this seems to me a piece of critical iconoclasm comparable to the same author's attempt to discredit the orthodox history of Tōshōdaiji; and equally fragile both in its destructive and its constructive arguments. Only 16 years difference are involved, however, between the 733 of the *Yōroku* and the 749 of Fukuyama's

century, according to the value given to the various records which concern it. The second is usually dated 769, the year recorded for Tōshōdaiji's "erection"; but one opinion has

hypothesis; in an architectural history almost completely devoid of certain dates, this is much better than usual.

Hattori, *op. cit.*, pp. 265 ff.; Amanuma, *Shiyō*, pp. 90 ff.; *Zūroku*, pp. 112-19; *N-shaji-shiryō*, pp. 56-8. For discussion of later additions to the Hokkedō, see below, p. 256, and note 443.

¹¹⁷ Fukuyama, pursuing his theory that Tōshōdaiji had a much later start, with more meagre resources, than its histories admit, supposes that the monastery founded by Chien-chên's followers in the 770's must have consisted largely of secular buildings re-used. The spacious and handsome Kondō cannot have been the product of the first generation, but was probably erected at the outset of the 9th century, in the period just before the death of its builder, the Chinese Ju-pao, in 815. In this connection, Fukuyama stresses the closeness of several of its icons to the "Kōnin" style of sculpture. See note 100. Kobayashi, on the other hand, stresses the honors paid by the Imperial House to Chien-chên, which are recorded not only in his biographies but in the *Shoku-nihongi*; e.g. the excerpts collected by Takakusu in *BEFEO* 28, pp. 35-6, in one of which (754/1/16) Empress Kōken names him at the head of the most distinguished priests, before the Tōdaiji founder Ryōben, and in another of which he is praised and promoted by Emperor Junnin (758/8/1). These unimpeachable signs of the esteem in which he was held make the statements in the biographies in no way suspicious; it is entirely likely that he was given the funds to erect his own monastery; and it is natural to suppose that in that erection the Kondō would be built first of all, as the most important focus of worship, so that it may be confidently dated in 759.

Hattori, pp. 250 ff.; Sato, pp. 131 ff.; Amanuma, *Shiyō*, pp. 99 ff.; *Zūroku*, pp. 132-41; *N-shaji-shiryō*, pp. 68-70.

¹¹⁸ See above, note 94. The quite reasonable opinion that the present main hall of Shinyakushiji was not the original main hall is expressed by Adachi in his "Chapelle principale de Sin-yakusizi" (in Japanese), *Tōyō-bijutsu*, Jan. 1934, special number on Nara period iii, pp. 218 ff. The original Buddha hall in all records appears as a building of 9 bays, housing 7 Yakushi images. Its effect must have been something like that of the existing main hall of Jōruriji 浄瑠璃寺 of the Heian period, a long chancel 7 by 2 with a single bay aisle all around. The present main hall is only 7 by 5 in all, and houses only a single Yakushi, with a ring of "Generals" around Him.

It has been argued that the "9 bays" of early records is a clerical error for "7 bays"; and that the picture of the Tōdaiji precincts made in 756 shows Shinyakushiji with a building, certainly its main hall, with only 7 bays. The latter argument is almost worthless, since the picture elsewhere is inaccurate in such details, showing the 11-bay Daibutsuden, for example, with only 3 (cf. *Tōei-shūkō*, iv, pl. 204).

Adachi goes further still, to argue that the existing main hall cannot originally have been any other Buddha hall, or Kondō, beside that devoted to the Seven-fold Yakushi, for these reasons: its depth is 5 bays, instead of the 4 seen elsewhere in Nara practise; its end entrances are at the middle, instead of toward the front, as elsewhere; its bracketing is too simple; it lacks a ceiling; and the framing system thus exposed is merely a primitive truss, instead of the formal two-tiered beam design seen in other Kondōs. (See below, p. 117, for these points.) This unusual plan proportion and simplicity of design accord better with a lecture hall (cf. that of Tōshōdaiji); but even here Nara tradition calls for a 4-bay depth. Adachi concludes that the existing building was at first some large, but quite secondary element in the monastery layout; and that nothing can be decided by its position, since the whole original site may well have been shifted.

Adachi's argument perhaps lays too much stress on plan proportioning. Not enough evidence of Nara period architecture has been preserved to make it possible to fix any infallible rule. A building practise so strongly affected by continental modes may well have digressed from its normal canons under temporary foreign influence; on the continent we know that at least the celebrated Silla temples of Hamūnsa and Pulguksa had Kondōs of 7 by 5 and 5 by 5 respectively (see p. 80): The entrance at the middle of the end seems to me an early feature, linked in design to the centrally placed, round altar (see p. 68). The whole problem needs further study.

been voiced that this building was lacking in the original foundation, and was not added until the ninth century. The main hall of Shinyakushiji is known to have been blown down in a typhoon of 962 (having been built to replace a predecessor burned down in a general temple fire of 780). But it is generally supposed that the present hall represents a re-erection of the old timbers on the old lines; and thus may stand with the other two as stylistically of the Nara period.

Three other buildings are related in purpose, although of somewhat different type. The lecture hall of Tōshōdaiji (fig. 9) is the oldest remaining of its class, and is said to have been originally one of the assembly halls of the Imperial palace of Heijō, presumably presented and moved to the temple after its replacement by a larger or more modern building.¹¹⁹ The purpose of the lecture hall type differs from that of the icon hall in accommodating a larger number of monks, for exposition and discussion of the *sūtras*. From a structural standpoint, expansion of seating capacity can be most readily effected in Far Eastern architecture by an increase in the building's length; this entails merely the use of additional elements like the rest, whereas an increase in depth necessitates the use of longer and larger girders, which may be difficult to secure and dangerous in framing. The typical lecture hall of early date in Japan is thus from two to four bays longer than the icon hall in front of it. In most other respects, the two are identical. The lecture hall also contains an altar with images before which offering is made, a chancel area (here including seating space for the congregation) and a surrounding aisle; and it presents the same problems of cross-section.

The Dempōdō in the Eastern Precinct of Hōryūji¹²⁰ differs in degree of importance,

¹¹⁹ The assertion that the Tōshōdaiji Kōdō had originally been a building of the Heijō palace at Nara, frequently made, seems to go back to the late 8th century *Enryaku-sōroku* 延暦僧錄, compiled by Chien-chên's Chinese disciple Ssū-t'o (died 805). Here the statement appears in a biography of one Kyōmi 淨三 (by descent a prince, 智努王, given the name Funya Kyōmi 文室淨三; Chūnagon, holder of many important posts, from 764 on "Grand Guardian" 大鎮 of Tōdaiji and Hokkeji etc., died in 770). The Imperial Palace making over to Tōji 唐寺 ("the Tang temple," i.e. Tōshōdaiji) to be its lecture hall, as a bequest, a dismantled building of 9 bays, he became by an Imperial order orally given (the temple's) superintendent, Bettō 別當; whereupon in all humility he received the Bodhisattva Commandments from the Great Master Chien-chên, and became his disciple "大内施先上解歌九間屋入唐寺爲講堂口勅合別當因茲伏膺大和上鑒眞爲菩薩戒弟子."

The quotation infers that the donation was made before Chien-chên's death in 763. The *Tōseiden* seems to corroborate this by its account of the death of the Master, which was heralded first by a vision seen by one of his disciples; that the purlins and cross-beams of the lecture hall were breaking into fragments 講堂棟梁摧折 (Takakusu translation, p. 57, vol. 29 BEFEO). The inventory in the *Shōji-engishū*, p. 22, states that it had previously been the Chōshūden 朝集殿 of the Heijō palace; i.e. one of the two Halls of Assembly in the outer court of the Hall of State complex, used by officials on state occasions (cf. Ponsonby Fane, *Kyōto*, p. 35, for description of the similar layout in the Heian palace).

Fukuyama (*op. cit.*, p. 210), discounts both the story of the disciple's vision and the ordination of the Minister Kyōmi, as propaganda by Ssū-t'o, of no value in dating. His theory that Tōshōdaiji's resources were slender predisposes him to favor the idea that its buildings were made over from dismantled secular structures, however; so that he raises no objection to the identification with the Chōshūden.

Hattori, pp. 215 ff.; Amanuma, *Shiyō*, pp. 104 ff.; *Zōroku*, pp. 142-3; discussion of restoration made during Kamakura by Sekino T., translated by Ponsonby Fane, *Trans. and Proc. Japan Soc. of London*, xx, 1922-3, pp. 105 ff.

¹²⁰ Fukuyama, in *Tōyō-bijutsu*, Jan. 1934, special number on Nara iii, sums up past opinions on the

being merely a minor hall, and so being roofed by the less monumental gable. First-rank buildings of the Nara period were typically hipped, while those of second importance were given the hip-and-gable combination seen at Hōryūji. Its plan and cross-section present no major differences from the rest. Its precise date is uncertain; and doubt has recently been cast on the generally accepted tradition that it was first a mansion of Lady Tachibana, wife of the minister Fujiwara no Fubito, and was moved to be the lecture hall of the Eastern Precinct at the latter's establishment in 739.

The third building of related type is the western "golden" hall of Kairyūōji (fig. 40) traditionally built in 731, and the sole survivor of the triple "golden" hall layout of Nara.¹²¹ It is gabled, and being at very small scale, three bays by two, contains no interior columns. Since its original altar has not been preserved, its plan is therefore of only minor importance.

Remaining eighth century buildings of other types furnish supplementary evidence. Two are octagonal secondary icon halls, the Yumedono of Hōryūji (figs. 10, 27)^{88, 120} and

Hōryūji Dēpōdō. The crucial source is the inventory given in the *Tōin-engi-shizaichō* of 761/10; traditionally interpreted as follows:

"Tile-roofed lecture hall, one; 84 by 36 feet. The mansion of Lady Tachibana, donated through priest Zenjiki." 奉納橘夫人宅者善提師申奉納.

Zenjiki was the abbot 上座 of Hōryūji at least from 758 to 761. Fukuyama makes two objections to the traditional interpretation. The character for "mansion" 宅, appears many times elsewhere in the inventory, used obviously as an honorific merely like the familiar 家. In connection with the gift of *sūtras*, etc., the text may say 正三位橘夫人宅奉納賜者; a formal phrase of donation which is obviously similar to that used for the Dēpōdō, but has nothing to do with any building. From this he maintains that the Dēpōdō was merely paid for by the pious donatrix, and so was probably a new erection—instead of being a mansion which might have been built as early as the beginning of the 8th century. As to the "lady Tachibana," he objects that at the period in question this name was given not to the lady who had been the wife of Fujiwara no Fubito and the mother of Empress Kōmyō, Tachibana Michiyo 三千代, who died in 733; but to her granddaughter, Konakachi 古那可智, who was a lesser wife of Emperor Shōmu, later married one Hirooka-ason, and died in 759. Fukuyama believes that the donation must have been made before her marriage in 757, after which she was called Hirooka-fujin; he points out that the Tōin inventory contains a series of entries recording donations of *sūtras*, *sūtra* cases, offering stands, etc., by lady Tachibana in 742 and 746, and so imagines that she paid for the erection of the Dēpōdō in the 740's, or early 750's.

The date usually given for the transfer of the Tachibana mansion is 739, the year in which the Tōin itself was erected through the enterprise of "Bishop" Gyōshin 行信 on the deserted and desolate site of Prince Shōtoku's Ikaruga palace. (See the *Hōryūji-tōin-engi*, *D-n-bukkyō-zensho*, *Jishi-sōsho* i, pp. 26 ff.). But the donor at that time is recorded as having been the Imperial Princess Abe 阿倍; Fukuyama believes that the mention of a different donatrix for the lecture hall means that it was erected at another time.

The buildings of the Tōin, having fallen into disrepair, were extensively restored in 859 by priest Dōsen 道詮. The inventory which records this operation speaks of the lecture hall as 七間二面; a technical phrase which means that its chancel was 7 bays long, and that there were aisles on two sides only, front and rear (see below, p. 162). This is an accurate description of the Dēpōdō. The building has been so often repaired that its original members are almost outnumbered by additions.

Hattori, pp. 317 ff.; Amanuma, *Shiyō*, pp. 114 ff.; *Zūroku*, pp. 158-61; *N-shaji-shiryō*, pp. 59-60.

¹²¹ For the Saikondō of Kairyūōji, I know no more trustworthy data than the temple tradition that it was erected, with the monastery as a whole, in 731.

Hattori, pp. 271 ff.; Amanuma, *Zūroku*, pp. 130-1.

the Hakkakuendō of Eizanji.¹²² By definition "central," this type was no more capable of important plan development in the Far East than the pagoda, and so is interesting chiefly in section and details. The same may be said of the other buildings: the two pagodas of Taimadera;¹²³ the refectory complex, Jikidō and Saiden, of Hōryūji (figs. 8, 10);¹²⁴ the two extant gateways, Tōdaimon of Hōryūji (fig. 10) and Tengaimon of Tōdaiji (fig. 36); the Hōryūji two-storeyed Kyōzō, or *sūtra* repository (fig. 7); and "log-cabin" storehouses of Tōdaiji and Tōshōdaiji (fig. 41).¹²⁵

Of the Nara buildings most closely comparable to the Kondō of Hōryūji in status, two retain many Asuka features in plan. In the main hall of Shinyakushiji, the altar platform is actually round (except for a projection on the front, perhaps added later; fig. 22). It stands in the middle of the sanctuary space; the main icons, Yakushi and His attendants Nikkō and Gakkō, face toward the south, but the remaining figures of the twelve guardian "Generals" are set around the altar circle facing outward on radii. Only the general proportioning of the hall, approximately 1.6 of length to 1 of depth, marks a departure from the Hōryūji feeling of squareness; the east-to-west axis is hardly less strong than that of the Kondō, since the five bays here given to depth make possible doors in the middle of each end wall. The chief difference in interior planning of the two buildings, aside from the contrast between round and rectangular altar platforms, is that the greater size of the Shinyakushiji sanctuary—five by three bays, since the whole hall is seven by five—makes it much larger than the altar it contains, and thus provides open space at either end, an arrangement like that of the typical lecture hall.

The Hokkedō or Sangatsudō of Tōdaiji shows a further stage of evolution, although its date seems to be a half century earlier (figs. 21, 23, 24). General proportions, five bays by four, are closer to those of Hōryūji, and here again the platform fills the entire chancel, so that only an ambulatory is left open. These similarities are at first sight more apparent

¹²² Temple traditions states that this building was erected by Fujiwara no Nakamaro 仲麿 (710-64), as a memorial chapel to his mother. Frequently repaired; recently restored to what was presumably its original state, by a purge of later additions.

Hattori, pp. 299 ff.; Amanuma, *Shiyō*, pp. 115 ff., pls. 33-4; *Zūroku*, pp. 172-9.

¹²³ Not even tradition has anything to say about these pagodas. Both apparently much restored in Kamakura; recently purified. The two show clearly differentiated stages in the evolution of bracketing; see below, p. 107.

Hattori, pp. 306 ff.; Amanuma, *Shiyō*, pp. 120-1; *Zūroku*, pp. 166-71.

¹²⁴ See note 53 above. Hattori, pp. 276; Amanuma, *Zūroku*, pp. 152-7. Both extensively restored in Kamakura.

¹²⁵ *Tōdaimon* of Hōryūji: no textual reference except entry in the Hōryūji inventory concerning "priests' gateways" (see p. 27, above). Hattori, pp. 286 ff.; Amanuma, *Zūroku*, pp. 144-7. Extensively restored in Kamakura. *Tengaimon* of Tōdaiji: the main north-west gate, named because of the *Tengai-e* 轉害會 ceremony held in honor of the tutelary divinity Hachiman. Traditionally constructed of timbers left over from great south gate; blown down in typhoon of 1027 and set up with partly new materials; extensively restored in early Kamakura, in the new "Indian style." Hattori, pp. 283 ff.; Amanuma, *Zūroku*, pp. 96-111, Fukuyama in *T.-Bizyutu*, Nara iii, p. 236. *Kyōzō* of Hōryūji: presumably that recorded in the inventory, with which its dimensions check; the only element at the rear to escape the fire of the early 10th century. Hattori, pp. 280 ff.; Amanuma, *Zūroku*, pp. 148-51. *Storehouses*: Hattori, pp. 312 ff.; Amanuma, *Zūroku*, pp. 120-23.

than any change. A strong east-to-west median line is marked by the three main icons standing on the altar, and is emphasized further by large sunburst aureoles of painted wood set one above each in the ceiling. Further analysis shows changes which in the light of subsequent architectural history are of great importance. All the images face southward, except for the single figure of the guardian Shukongōjin 執金剛神 which is set in a close shrine at the rear of the altar, facing north. The details which emphasize this minor focus on the north are all of Kamakura style, and thus give no positive proof that it was a part of the original altar scheme.¹²⁶ The doorways in the end walls are no longer as close to the median line as possible, but are set at either end of the southern aisle, marking this off in a certain measure beyond the others. In addition, the rear of the altar platform is closed by a wall which rises to the ceiling, and which with the unanimous southward orientation of the figures in front of it gives the interior a strong sense of front and back. It is possible that this wall is a later addition, made at some time when the desire for an emphasis on the south was stronger even than in the Nara period. No such rear partition exists at Shinyakushiji, and although it is found in both lecture and "golden" halls of Tōshōdaiji, these also may be additions. The first of almost certain date appears in the Kondō of Murōji 室生寺, identifiable as early Heian by the style of the *Mandara* paintings still preserved upon it.¹²⁷ The practice is thus certified for the ninth century. Whether it existed also in the eighth is a problem difficult or impossible to solve; and in view of the short interval involved, of no great importance.

The lecture hall of Tōshōdaiji, in a spacious interior comparable to that of Shinyakushiji, contains images facing south and backed by a closing partition on the north. The building is nine bays by four, with a chancel seven by two. Images and partition occupy the central three bays; while two bays square at each end are left completely open for the assembled priests.

In the Kondō of Tōshōdaiji, the possibilities of southward orientation are carried as far as the scheme of chancel and ambulatory permit (figs. 25, 26, 28). In this case, the southern aisle is completely separated from the rest by being made an open front porch. The front wall is thus shifted back to what would otherwise be the front line of the chancel. In the plans of Hōryūji or the Hokkedō, such a change would have been impossible, since it would have blocked all passage in front of the altar. Here, however, the altar platform neither fills the whole chancel area nor is placed symmetrically under the axis of the roof-ridge. At the rear it backs against the interior column line, and is closed off. At the front it reaches only about three-fifths of the way across the chancel. Tōshōdaiji's relatively large scale makes it possible to give adequate dimensions by this scheme both to the altar and to the service space in front of it, the latter being about nine feet across. Of the seven bays of total length, the altar fills three, the rest being left open for seating and circulation.

¹²⁶ A fabulous account of the origin of this image of Shukongōjin is contained in the *Nihon-reiki* 日本靈異記 (a collection of didactic Buddhist anecdotes, written in the early 9th century by priest Kekai 景戒; cf. *Kōji-ruien*, *Shūkyōbu* iii, p. 1100). This closes with the sentence: "At present it stands in the Kenzokudō of Tōdaiji (by?) the north door" 今東大寺於羈索堂北戸而立也. Presumably it faced north at that time, for otherwise it would have been obscured by the main icon.

¹²⁷ See below, p. 149, and note 262.

Particular attention should be paid, finally, to the existence in the Nara period of a series of buildings which seem to have shared their functions, in one way or another, with other erections either close in front or actually attached. The importance of this radically different conception of the hall, as a complex rather than an independent unit, will be made clear in the following chapter, where its effect on the evolution of temple design in the Heian period will be traced. A striking case is given by the Saidaiji inventory; there the icon halls of each of the two subordinate precincts, dedicated to the Eleven-headed Kannon and the Four Heavenly Kings, were "paired," the two halves of the complex being so close together that it was thought necessary to record only their combined depth. In the case of the Nara style refectory, an actual example remains at Hōryūji, where the Jikidō proper has a smaller, open building, the Saiden, a few feet in front of it (fig. 8). The vanished refectory of Kōfukuji is described in that temple's inventory as a complex of Jikidō and Zenden 前殿, "fore-building." At the great scale of Tōdaiji, the group seems to have been more elaborate,¹²⁸ involving two large blocks some distance apart joined by a third at right angles, so that the whole plan had a dumbbell shape (fig. 15). A less pretentious version of the same three-part design may have existed also at Saidaiji. The Refectory Precinct there is described in the inventory as including one large Jikidō, a slightly smaller hall, and three "eaves corridors," two on east and west and one at the middle. To judge from the phrasing of the text, the last may well have served as a link between the two major blocks, while the others joined the whole group to neighboring buildings on each side.

With reference to subsidiary centers of worship like those of Saidaiji, again, it is interesting to notice that the Tōin, or Eastern Precinct, of Yakushiji, erected in the Yōrō period (717-723), contained in addition to its main hall a building termed variously Saiden and Zensaisha 前細舎, "front narrow shelter."¹²⁹ The latter name suggests both positions, form, and comparative simplicity. A Saiden existed also at Saidaiji, in some relation to the hall of the Small Pagoda Precinct.

How the fore-building or the more elaborate dumbbell plan was utilized in the monastic refectory can be only a matter of the purest conjecture. In the case of the subordinate icon hall, the addition was probably justified by the same problem which became more pressing and exercised a greater effect in the succeeding Heian period: the necessity of providing adequate shelter for a lay congregation whose presence in the hall itself would have been inconvenient or impossible. This problem, entirely untouched by Nara architecture in general, will receive detailed attention in the next chapter. One factor should be mentioned here. The need of a special seating space for lay worshippers, separated from the area

¹²⁸ See above, pp. 25, 51, 60, 61, and notes 53, 86-7, 99. At Tōdaiji not only the refectory buildings, but even their column bases have disappeared. The *Tōdaiji-yōroku*, iv, p. 72, says of it by way of inventory only: "One hall, single- (character missing, perhaps 重 for "storeyed"), 11 bays, provided with a connecting corridor on the west." The elaborate complex given by Amanuma in his reconstruction is based on a plan of the Tōdaiji buildings, now in the possession of the Tōkyō Imperial Household Museum, the so-called "Tōdaiji-sashizū" 東大寺指圖. This is a copy on paper of an original which was on "rough cloth" of the Nara period. The time when the copy was made is not known; Amanuma believes that the original, from the care which it shows, may have been drawn up not very long after the Tōdaiji precinct map of 756 (opinion expressed in a letter of August, 1938).

¹²⁹ Inventory in the *Shōji-engishū*, p. 20. For Saidaiji see above p. 61.

taken up by ritual performances, was aggravated in Heian by the introduction to Japan of the new sects of esoteric Buddhism, whose first principle was the secrecy of all important acts of priestly ceremony. The formal arrival of Tendai and Shingon with their highly organized mysteries was by no means the first sign of the infiltration of esoteric ideas into Japanese Buddhism, however. Such influence seems to have grown all during the Nara period, in the increasing familiarity with *dhāraṇī*, the worship of new, esoteric icons and scriptures, even the use of some of the ritual implements later characteristic of Tendai and Shingon; the establishment of formal sects was merely a final step. Saidaiji, as its inventory shows, possessed among its architectural details a number of forms not found in the normal Nara categories, and hence suggestive of a later or different source. The record proves the installation of several icons of pronounced esoteric character. In addition to its main image, the hall of Yakushi contained also subsidiary figures of the horse-headed Batō-kannon 馬頭觀音, the peacock-riding Kujaku-myōō 孔雀明王, and a Makamayuri-bosatsu 摩訶摩由璃. The hall of the Eleven-headed Kannon possessed also two Kongōzō-bosatsu 金剛藏, and that of the Four Gods two "fire-headed" Kuzu-bosatsu 火頭.¹²⁰ All these divinities are typical of the Buddhism of mystery and secret ritual; there is nothing incongruous in the supposition that the Saidaiji "paired halls" were provided for the convenient practise of such a proto-esoteric faith, one half of each being reserved for hidden ceremonies and the other left open to the public.

Whatever the function of Saiden or "paired halls," the type of architectural design which they must have represented was not unprecedented in Japan of the Nara period. The standard layout of every official Shintō shrine in the same era included an isolated fore-building, the Haiden 拜殿, set for purposes of non-professional worship some distance in front of the closed sanctuary (fig. 44).¹²¹ One special shrine type, devoted to the war-god Hachiman, which seems to have been developed in the Nara age, is related both to the "paired halls" of Saidaiji and to the dumbbell-shaped refectory. In this, sanctuary and Haiden, as blocks of the same length, are set so close together that the two roofs share a common gutter between; while passage from one to the other is sheltered by an intermediate flat roof, crowded under the principal eaves (fig. 38).

CONTINENTAL RELATIONSHIPS:

The Hōryūji "golden" hall plan, facing in all four directions and designed to accommodate the Indian *pradakṣiṇa*, seems almost certainly a late derivative of the *stūpa* and its surrounding passageway. A part of this evolution, as we have seen, is marked off conveniently into steps by the cave temples of India and China. Whether the latter represent the actual geographical line of transmission between Sāncī and Hōryūji is a more difficult problem, involving the whole question of the Buddhist arts of north and south China in the archaic period. Historical evidence implies that the source of Asuka Buddhist

¹²⁰ From the Saidaiji inventory; *D-n-bukkyō-zensho*, *Jishō-sōsho*, ii, pp. 161 ff.

¹²¹ From the memorial concerning "great, medium, and small shrines" presented in 771/2/13 by Fujiwara no Momokawa 百川 (discussed by Hattori, *op. cit.*, p. 245; quoted in his *Nihon-kokenchikushi*, Kyōto, 1926, i, pp. 291 ff.). For the Hachiman shrine type, see *N-shaji-shiryō*, p. 7; or Akiyama, *Shintō and its Architecture*, Kyōto, 1936 p. 72.

architecture, coming through Pekche as intermediary, is to be found primarily in the Liang dynasty in the south rather than the northern Wei. It is true that the great monastic buildings of the Liang Emperor Wu Ti might in their turn have been influenced in plan by a cave temple tradition, which had been carried first to the north across central Asia. So much of south Chinese Buddhism seems to have come by sea rather than overland, however, that it would be reasonable to look, in the hypothetical Liang style, for some more direct connection with Indian buildings than that given by Yün-kang and Tun-huang.

The problem is complicated by the lack of any *constructed* parallel in the Far East to the stage of centrality and radiation seen at Hōryūji. These qualities are less pronounced in later Japanese buildings, their progressive abandonment in Nara and thereafter being understandable through historic evolution. What is puzzling is their absence from the earliest Korean remains, comparable to Hōryūji in date. No ruined "golden" hall of Silla or Pekche shows anything like the four-sidedness of Hōryūji or its near square. Their proportions are the pronounced oblong typical of Far Eastern building, and what remains of their interior disposition shows a marked orientation toward the south. The present state of architectural knowledge, therefore, furnishes no link to fill the gap between the central-shaft cave type seen at Yün-kang and its timber-framed relative in Japan.

For other general qualities of plan and cross-section beyond those of centrality and radiation, the continent supplies in one form or another the explanation for almost everything found at Hōryūji and in the constructions of the Nara period. The closest parallels in time may of course be drawn, for ground-plan only, from the ruins in Korea. These are unanimous in showing the chancel and-ambulatory formula, wherever column bases have been preserved in sufficient numbers to make a reconstruction possible. From one point of view the Korean evidence indicates a persistence on the peninsula of a stage of temple planning more primitive even than Hōryūji: a number of ruins of monasteries of large size possess "golden" hall sites only three bays deep. This is the case at Sach'ën-wangsa, completed in 679, and probably is the explanation of the bases of Mangdōksa, its sister temple of 684, both halls being five bays long. The temple whose ruins remain at Muhōri in Keishū-gun, which seems to be of the eighth century, possessed a "golden" hall also five by three. This depth has continued in Korea to become that in general use in recent centuries, whereas it is unknown in Japan except in buildings of the smallest scale. The triple monastery of Mirūkssa in Pekche had five by four halls in its east and west precincts; possibly the narrower buildings of Silla, which must have been able to accommodate less in icons and ritual both, may have reflected the comparatively backward state of that kingdom in its early centuries. Larger "golden" halls existed in Silla, as well, as the result of exceptional effort. As early as 584, that of Hwangnyongsa was completed with a proportion of nine to four. A five-bay depth existed in at least two royal establishments, Pulguksa (whose "golden" hall, five bays long, may have been built in 575) and Hamūnsa (seven long, finished 682).

The exceptionally good preservation of the column bases of Hwangnyongsa makes possible a reconstruction of the general outlines of its interior.¹²³ The ambulatory enclosed

¹²³ Fujishima, in *Kenchiku-zasshi*, xlv, pp. 316 ff., 319 ff., 1035 ff., 278 ff., 1049 ff., 1370 ff., respectively.

a seven by two chancel area. The entire length of this was filled by a stone platform altar, running along the rear of the chancel approximately one bay deep, and turning forward at each end to make a very wide, shallow "U" shape. A large Trinity was installed at the middle of the platform, and subsidiary images were strung out at either side. The effect must have been entirely unlike that of the Hōryūji altar, and much closer to those of the Nara period (as the latter type may be seen, for example, at Kōfukuji). The strong emphasis on front and rear given by the "U" shape had no parallel, so far as I know, in Japan. Comparable altar shapes appear in considerably later Chinese monuments: the Liao dynasty Pao-chia-chiao-tsang-tien 薄伽教藏殿 of Hua-yen-ssū 華嚴寺 in Ta-t'ung-fu; the Chin dynasty Ta-hsiung-pao-tien 大雄寶殿 of the same temple (fig. 35); and the Southern Sung San-ch'ing-tien 三清殿 of the Taoist Yüan-miao-kuan 圓妙觀 in Suchou.¹³³ Such parallels suggest that the altar remains at Hwangnyongsa may date from a later alteration of the "golden" hall; at least, perhaps, from the rebuilding which must have followed a typhoon in 674, which "destroyed Hwangnyongsa."

In China proper, I know no evidence in early Buddhist architecture for the square interior suggested by the Hōryūji Kondō, except perhaps the first of all known Buddhist buildings in the Far East, the two-storeyed hall erected by Chai Jung at the end of the second century.¹³⁴ Since this was crowned by something like a pagoda spire, it may have had a central type of plan. Its character, however, suggests a combination of hall and pagoda types due to lack of familiarity with more orthodox Buddhist practise, rather than any sign of a tradition subsequently to be continued in Chinese architecture. The squareness of Hōryūji is actually a quality conditioned first of all, in Far Eastern architecture, by small size. A building of monumental dimensions, in Chinese architectural practise, is naturally an oblong, since it is far easier to gain additional size by a mere repetition of bays in the longitudinal sense, than to provide larger timbers and more complicated framing for an expansion in depth. It is possible that radiation, in the sense of Hōryūji and Shinyakushiji, was a feature of early Chinese altars, the images facing to the rear and ends as well as to the front; but the emphasis of this centrality by a square enclosure, as in the cave temples, could have been natural in constructed architecture only at small scale.

The same change from centrality and radiation to a dominant single orientation, which is illustrated in Japanese temple architecture between Asuka and Nara, appears also in the cave temples of the continent. A transitional stage is that of the celebrated Sok-

¹³³ *Hwangnyongsa*: Fujishima, *op. cit.*, pp. 278-97, pls. i-iv. *Pao-chia-chiao-tsang-tien*: cf. "Report on the Ancient Architecture of Ta-t'ung" (in Chinese), Liang Ssü-ch'eng and Liu Tun-tseng, *Bull. of Soc. for Research in Chinese Archit.*, iv/3, Jun, 1934, pp. 16 ff. Erection in 1038 recorded by an inscription on beam soffit.

Ta-hsiung-pao-tien: *do.*, pp. 64 ff. Not included among the five buildings of Hua-yen-ssü which survived burning by the Chin Tartars, in the early 12th (as recorded by a stele of 1162); apparently corresponds to the "hall of 9 bays" which the same stele speaks of as being erected in 1140.

San-ch'ing-tien: cf. Liu Tun-tseng, "The Ancient Architecture of Soochow" (in Chinese), *Bull.* vi/3, Sept. 1936, pp. 21 ff., fig. 2. Restored many times, but essentials of present building go back to erection in 1179.

¹³⁴ See above, p. 39, and note 67.

kullam 石窟庵¹³⁵ on the ridge above Pulguksa in Keishū-gun, Korea, constructed at the mid-eighth century. Here the cave room itself is round, with figures of Arhats and Bodhisattvas in low relief around its circumference, and the altar is at the center; the space is the perfect setting for the *pradakṣiṇa* which is still performed in it daily by pilgrims. The one new note is the fact that the altar holds not four icons facing in four directions, but a single large statue directed toward the front. This happens to be roughly eastward rather than south, a variation from orthodoxy doubtless made necessary by the terrain. In the Chinese cave temples a like stage is illustrated at Tun-huang and Yün-kang. This compromise eventually gave way in the late Six Dynasties period to the same general emphasis on the front which was characteristic of Nara architecture.¹³⁶ Early stages of the final form may be seen in the great Ta-fo-k'ü 大佛窟 cave at Lung-mên, or at Yün-kang, where the main images have been moved to the rear wall and face to the front. This is the T'ang scheme seen frequently at Tun-huang. In some cases, the *pradakṣiṇa* is still possible, by means of a rough tunnel behind the chamber; where this is lacking, the practise must have been abandoned or altered. We shall find the ultimate design, with the altar against the rear wall and no means of passage behind it except outside the building, as a late phase of temple architecture in Japan; where it seems to be clearly the result of an altered practise of the *pradakṣiṇa*.

The earliest large group of temple buildings in China remains in the north, and dates from the Liao and Chin dynasties.¹³⁷ The majority belong to two large temples in Ta-t'ung-fu, Shansi: Hua-yen-ssü and Shan-hua-ssü 善化寺 (figs. 29, 33-35). Others of closely related type are in Hopei, belonging to Tu-lo-ssü 獨樂寺 in Chi-hsien 薊縣 (fig. 30) and to Kuang-chi-ssü 廣濟寺 in Pao-ti-hsien 寶坻縣. One is in Manchukuo, belonging to Fêng-kuo-ssü 奉國寺 in I-hsien 義縣. All form a group with certain general stylistic qualities which contrast with those of the fewer monuments remaining from Sung, further south. A strong, consistent conservatism makes them particularly valuable with reference to T'ang practice, and hence to Nara. The Liao buildings, in particular, show comparatively few signs of contact with Sung architecture. Remarkable advances were made in the South in Northern Sung, perhaps even in the tenth century. The official manual of architectural practise completed by Imperial order in 1100, the *Ying Tsao Fa Shih* 營造法式, illustrates a style radically different from that of Nara-T'ang tradition. Of these changes, which formed the basis of all orthodox architecture in later dynasties, only a part appears in the Liao work; a fact indicating a general absence of cultural communica-

¹³⁵ *Chōsen-koseki-zūfu* 朝鮮古蹟圖譜, Tōkyō, 1917, v, pls. 556-73. Constructed through the piety of the great Silla minister Kim Tae-song 金大成.

¹³⁶ Cf. Tokiwa and Sekino, *Buddhist Monuments*, text vol. ii, for cave plans. This progression in the nature and position of the main icon has been noted especially by Hamada, *Hōun* vi. See note 114 above.

¹³⁷ *Ta-t'ung-fu temples*: cf. note 133 above.

Tu-lo-ssü: Liang Ssü-ch'êng, "Two Liao Structures of Tu-lo-ssü, Chi Hsien" (in Chinese), *Bull. of Soc. for Research in Chinese Archit.*, iii/2, June, 1932.

Kuang-chi-ssü: do., "The San-ta-shih-tien of Kuang-chi Ssü, Pao-ti Hsien" (in Chinese), *Bull.*, iii/4, Dec. 1932.

Fêng-kuo-ssü: Sekino, "The Architecture of the Fêng-kuo-ssü in Manchukuo" (in Japanese), *Bijutsu-kenkyū* 美術研究 xiv, Feb. 1933.

tion between the rival empires. What one sees instead is a sort of niggling elaboration of T'ang, leading to no conclusion except a dead end of meaningless complexity. North Chinese architecture, in a far backwater of culture, under Tartar rulers interested primarily in hunting and lechery, seems to have been carried on as a provincial continuation of the T'ang style which must have been its source. Many of its practises are confusingly prolix in comparison with T'ang, and are valuable as source material for the earlier style only in a negative sense. At its simplest, Liao building shows its inheritance of the same strength and moderation seen earlier at Nara.

The best adapted of Liao icon halls for comparison with those of the Nara period is a minor structure at Hua-yen-ssü, the Hai-hui-tien 海會殿 (fig. 29).¹²⁸ Its ground-plan, like that of the lesser Silla halls, is only three bays deep by five long; but the middle transverse bay is twice as large as the other two, so that the proportions are those of a normal five by four hall. An ambulatory runs all around the interior, leaving a chancel of normal size inside. The platform altar fills this across the rear; in general slightly more than half the depth of the chancel, it turns forward at the ends in the manner of Hwangnyongsa, furnishing a sense of enclosure of the sanctuary by images. The cross-section of the Hai-hui-tien presents orthodox Chinese practise in its simplest, most standard form, the type of roof framing which has continued almost unchanged to the present day, and which was probably in use at the dawn of Chinese civilization. The hall, being too deep to be spanned by a single girder, has on each transverse axis two interior columns. Each of these holds, in the longitudinal sense, its share of a purlin; between the two runs a girder. At approximately the quarter points of this bottom girder are set supports which hold higher purlin lines and a second-tier girder. At the center of the latter a king-post rises to hold the ridge-pole. The space at front and rear between wall and interior columns is spanned by an aisle girder, at the center of which is set a support to hold the aisle purlin. Two more purlins, finally, are set beneath the eaves, and are supported by the eaves bracketing. Longitudinal roof framing thus consists of nine purlin lines, and an additional line of support above each outer wall. Over the purlins run strong rafters; on these are placed sheathing, a layer of clay mud, and the tiles of the roof covering.

The structural formula here expressed is of the utmost simplicity in basic timbers, regardless of what details of bracketing or bracing may be added for slightly greater efficiency. The relationships between verticals and horizontals, running in either the longitudinal or the transverse sense, are direct and inevitable. The whole construction is perfectly visible, and functional in every element; its design has the symmetry which is the natural result of symmetrical roof slopes. Other Chinese halls, elsewhere in Ta-t'ung-fu, in the rest of the Liao-Chin group, and of every other period, show precisely the same system of roof framing. The cross-section may be simpler where a shallow hall makes interior columns unnecessary; or more elaborate, with additional columns and higher tiers of beams,

¹²⁸ *Bull. iv/3*, Ta-t'ung report, pp. 53 ff. Stylistically of the Liao period. The Chin stele of 1162, mentioning five buildings which survived burning at the end of the Liao, does not cite any "Hai-hui-tien"; Liang believes that the latter must correspond to the hall which it records as the "memorial chapel of the Minister of Instruction, Master Shou" 守司徒大師影堂, and thus that its name has been changed. See figures 58-70 in text, and drawings at front, pls. 9-13.

in buildings of great size; in any case the principles and everything but the minor details of their application are the same. There is no difference in the framing if a ceiling makes it invisible, except that the members are less carefully worked. This is so in one of the earliest remaining Chinese buildings, the high Kuan-yin-ko 觀音閣 pavilion of Tu-lo-ssü (fig. 30), re-built in 984;¹²⁰ and it holds in every house and palace of Peking today. Exactly the same system is seen in the earliest Korean buildings still standing, from the Koli period; continued in use throughout subsequent Korean architectural history; and must have been the method of constructing the lost halls of Silla and Pekche. It is the system, finally, which must have been used in Japanese temple buildings of Asuka and Nara, but which in most of them today has been replaced by an entirely different method, of later Japanese invention. As we shall see, a few early buildings in Japan—among icon halls notably the Hokkedō of Tōdaiji—have retained this original Chinese cross-section more or less unaltered, and so give actual evidence of what should naturally be expected in all of them.

The cross-section of the Hai-hui-tien, as a simple and early illustration of the Chinese standard, explains one of the features of the Chinese plan which we have seen in Korean and Japanese evidence several centuries earlier, and which remains, with slight modifications, in Ch'ing practise today. The chancel-and-ambulatory formula, symmetrical at front and rear, is not merely a function of the Buddhist *pradakṣiṇa* which it accommodates, but a natural product of structural convenience. If the depth required in a building is greater than that attainable by a single girder span, interior supports are necessary. Chinese buildings with any pretense of formality usually avoid a depth of two girder spans, for a hall so divided by columns running beneath the ridge-pole can be formally used only in its separate front and rear halves. Plan design usually jumps, therefore, from a single bay of depth to a minimum combination of three, with the columns spaced in a natural symmetry beneath the girders they support. It is natural again, for monumental purposes, to emphasize the central area, where the ceiling or open roof may be highest, by a spacious floor; and so the interior columns are set not evenly, but closer to the outer walls, producing areas like aisles across front and rear and an ample room at the center. This symmetrical division of the cross-section into three as a normal minimum, is the natural result first of structural convenience and next of the desire to provide an interior setting of dignity and spaciousness. The classical impetus toward monumentality in Chinese architecture was given by the palace, which stood alone in importance from the beginnings of Chinese culture until the introduction of Buddhism long after. In the palace as the standard of formal design, the open central area with its high ceiling was that occupied in his public capacity by the king or emperor. In the Buddhist temple, based in almost every essential on the palace, it became the altar of the god. It may have been true that the authority for such a central placing of altar and images was that of Central Asian and Indian precedent, but this was only a reinforcement of what must have been an already ancient tradition in China.

The longitudinal section of the Chinese hall, in the same high reaches of monumental

¹²⁰ *Bull.* iii/2, Tu-lo-ssü, pp. 49 ff., pls. 1-5 at front, figs. 23 ff. The date of the pavilion is given by a lost stele of 986, the text of which is preserved in the *Jih Hsia Chiu Wen K'ao* 日下舊聞考.

design, seems to have been subject to more variation due to differences of use than the cross-section. The great Han palaces which set the ideal of Imperial magnificence for succeeding centuries and hence served as the distant prototypes of the Chinese Buddhist temple, were apparently divided into three parts longitudinally.¹⁴⁰ The end sections, or *hsiang* 廂, in this case were not mere aisles with a basis of structural necessity, but were spacious apartments screened from the central area by curtains, and capable of accommodating ceremonies at a minor scale of their own. The dimensions recorded for the Ch'ang-lo Palace, built under the Han Emperor Wu Ti, may be interpreted as giving each *hsiang* a width of 73.5 Han feet, about 15% of the total. Granting that the Han foot was considerably smaller than the present one, this space would still have been far wider than any aisle. By a method of subdivision of which the details are unknown, and which may have been merely temporary, the great hall contained also various lesser apartments. Certain among these may have been screened off from the total of the *hsiang*, others were set perhaps in the "aisle" at the rear of the central area. Some of this tradition of space utilization may have survived at a considerably later date in Japan; for two halls in the private quarters of the Emperors of Heian and Kamakura, the Shishinden 紫宸殿 and Seiryōden 清涼殿, in plan at least suggests features which seem to have been characteristic of the palaces of Han (fig. 32).¹⁴⁰ All such divisions, however, were the result of secular problems which had no counterpart in Buddhism, and hence under normal conditions were never made in the temple.

By comparison with the Han palace, the "golden" hall was all Hall of State, expressing one major function only, in a single spatial setting. Its sole longitudinal differentiation was one like that of the cross-section, into chancel and aisles. In this case, the aisles were actually used as such, to provide a means of circulation necessitated especially by the *pradakṣiṇa*, and hence were as important at the ends of the hall as across front and rear. At the ends, also, they were given a structural justification, equal to that in cross-section, by the hip roof normal in monumental architecture of the early centuries. Under the east and west slopes at either end, the same system of purlins existed as beneath the longer north and south slopes, and required the same spacing of interior columns. Thus a number of factors, partly structural, partly religious, and partly the expression of a desire for simple monumentality, combined to produce the ground-plan typical of early temples in the Far East, with its chancel and ambulatory, symmetrical about both axes.

We have seen in Japan, in the change between the "golden" halls of Hōryūji and Tōshōdaiji, how this original bi-axial symmetry, with the directionlessness of the path around the Indian *stūpa*, was altered into an emphasis on the distinction between front and rear. The change may have been brought about by several reasons, one perhaps the parallel with secular ideas of rank which the close similarity of palace and temple must

¹⁴⁰ Cf. Liu Tun-tseng, "Ta-chuang Shih Notes," *Bull.* iii./3, pp. 160 ff. His fig. 11 reproduces the traditional Japanese Shinden plan, i. e. the plan of the central building of the Heian period mansion. The plan of the Imperial Seiryōden may be consulted under that heading in the *Kokushi-daijiten*. The *hsiang* may have been of very ancient origin, for the palace building of the Shang excavated at An-yang already shows them (there without any aisle; Creel, *Birth of China*, fig. 1; my fig. 31). For the Shishinden, see below p. 193, note 336, 339.

have presented. An Emperor was honored from the front, not from all sides (fig. 4, 74). In addition, the ranging of priests around a four-sided ambulatory can never have been a convenient way of collective worship. There must always have been a focus of service before one primarily important Buddha or Trinity, from which the congregation on the ends or rear of the platform altar were more or less screened by their unfavorable position. Even in India, for perhaps the same reasons, a similar transformation took place in the arrangements of the cave temple; and the *stūpa*, which at the outset had been at the center of a circle, ended by being in the position of a Christian apse, with a semicircular passage left behind and a long nave opened in front. So far as the evidence of the Nara period goes, the change in the Far East by the middle of the eighth century was not very great. The platform had been diminished in depth in certain cases to free a greater area for service at the front, and the rear aisle had perhaps been rendered even less a part of the rest through its separation by the wall behind the altar; still the basic combination of chancel and ambulatory remained.

Several of the Liao monuments of north China show a marked advance beyond the stage of Nara. In the present complete absence of knowledge regarding the T'ang style of China proper, it is impossible to be sure at what period this advance was made; from the general character of Liao architecture, it seems to me probable that the change—a really important one, in contrast to the meaninglessness of Liao variations in general—had already been begun in late T'ang. In the temple buildings of this type (fig. 35), the ambulatory may hardly be recognizable; and while a rigid east-and-west symmetry remains, the front and rear halves of the hall may be quite different.¹⁴¹ In the Liao San-ta-shih-tien 三大士殿 of Kuang-chi-ssü, the two middle columns of the front aisle have been moved back a half bay, transforming a mere passageway on the south into a sort of anteroom before the sanctuary. In the Chin dynasty Ta-hsiung-pao-tien of Hua-yen-ssü, a very large building, this same inward shifting has been applied to six aisle columns each on front and rear; so that while in the east-and-west sense the old division into narrow aisles and wide central area remains, on the transverse axis there is a quite new proportioning of spaces (fig. 35). The same effect of a spacious room at the front of the hall is achieved in two large buildings of Liao, the Ta-hsiung-pao-tien of Shan-hua-ssü and that of Fêng-kuo-ssü, by omitting all but the corner columns of the south aisle, and carrying the space thus formed back to the next column line (fig. 34).

These aberrations from the early T'ang standard are mentioned here because they show that even in China the inadequacy of the chancel-and-ambulatory scheme was soon admitted and struggled against. They serve, therefore, as a preparation for the even more drastic abandonment of that standard which we shall see in the next chapter as a characteristic of the most progressive architecture of the Heian period in Japan. Their possible effect on Buddhist worship between the ninth and eleventh centuries in China is illustrated by contrasting phrases in the descriptions given by two Japanese pilgrims of the great ceremonies in T'ien-t'ai sect temples which they attended. Jikaku-daishi in the mid ninth century records a great maigre feast at K'ai-yüan-ssü 開元寺 in Yang-chou 揚州 with the words:

¹⁴¹ Cf. table of comparative ground plans, given in Ta-t'ung report, *Bull.* iv/3, fig. p. 140.

"Five hundred monks congregated at dawn at this temple, and seated themselves in rows along the east, north, and west aisles inside. . . ." ¹⁴²

Presumably the south aisle in this case was reserved for the higher clergy actually officiating at the service. The Śramaṇa Jōjin 成尋, on the other hand, attending what he would have pronounced a *Kongō-hannya-e* at Lung-hua-pao-chêng-ssū 龍華寶乘寺, near Hang-chou in 1072, saw that:

"The assembled monks stood in line(s?) on left and right in front of the Buddha. . . ." ¹⁴³

The comparison in these two instances may be a wholly unfair one, if there was a marked difference in the number of participants between the two. It is possible, however, that the change recorded by Jōjin was aided by an expansion of area in front of the altar; and it is very likely, from the converse point of view, that the general shift to a concentration of worship on the south effected a more convenient distribution of space in later Chinese halls. At the end of the Chinese development, in temples of the Ch'ing dynasty in Peking, the rear aisle has been narrowed to the minimum requirements of passage, and the end aisle often have disappeared entirely.¹⁴⁴

THE NARA PERIOD: CROSS-SECTION:

The presence or absence of the type of cross-section seen at Hua-yen-ssū in the Hai-hui-tien—that is to say, of the original type of roof framing in pure Chinese style—is not difficult to determine in buildings remaining from the Nara period.

The original has clearly been preserved in the Nara portion of the Hokkedō of Tōdaiji (fig. 21). The fundamentals of roof framing are here the same as those of the Chinese hall; differences exist merely in details. The aisles are comparatively narrow, and so require no purlin line halfway between the columns. The main girder is raised on bracketing, instead of resting on the column heads. There is a flat, coffered ceiling along the bottom of the upper girder, enclosed beneath by a high, slanting cove, which conceals the apex of the roof interior. The roof itself is a thin shell, resting directly on the rafters.

The same sort of cross-section seems to have been preserved in the western "golden" hall of Kairyūjō, reduced to its simplest terms by the absence of interior columns or a ceiling.

In several other instances—the great east gate and *sūtra* repository at Hōryūji, the lower eaves of the Hōryūji "golden" hall (fig. 20), middle gate, and pagoda, and of the pagodas of Hōrinji and Hōkiji—the change has been a very slight one: the introduction, between rafters and sheathing, of longitudinally running strips of approximately rafter dimensions, which provide a narrow air space between the outer shell and what is visible on the interior. It is apparently a compromise between the visual effect of the low roof of Chinese tradition, hugging its framework, and the double-shell roof of later Japanese practise. In the pagodas, this quasi-original treatment is found in the lower eaves, because

¹⁴² *D-n-bukkyō-zensho*, *Yūhōden-sōsho* i, p. 182.

¹⁴³ Jōjin: "Santendai-godaisanki" 參天台五大山記, *do.*, iv, p. 327. Jōjin (1011-81), also a graduate of Hieizan, because abbot of Daiunji 大雲寺 north of Kyōto, went to China in 1072, and spent the rest of his life there.

of the inconvenience of introducing any radical changes into their construction. The top roof is as easy to raise as any other; and thus the summits of early pagodas in Japan are usually framed in a more uncompromisingly modern style than the rest, which means that their slope appears perceptibly steeper. A healthy corrective to their visual effect is given by the two pagodas which have obviously never been re-roofed: the five-storey miniatures formerly in the possession of Kairyūōji and Gokurakuin, and now in the Nara Museum.¹⁴⁴ The details of the former are in a style very like that of the full-sized pagoda of Yakushiji, and so indicate a comparable "proto-Nara" date (fig. 62); the latter is in mature eighth century style. The roofs of both are all very gentle in slope.

The most thorough example of a completely altered roof among remains of the Asuka and Nara periods is that of the Kondō of Tōshōdaiji (fig. 28). The upper framing of this building seems to belong entirely to a restoration of the late seventeenth century, except for even more incongruous truss additions made in the late nineteenth. The interval between rafters and tiles is perceptible even at the edge of the eaves, and widens rapidly with the rise of the roof. The rafters actually hold nothing except at their very ends. The tiles and their sheathing are supported by small longitudinal strips, regularly spaced like purlins; these run at the head of small posts, which stand along a long beam, running down at a slant from above the chancel out to the eaves' edge. This last member, called *hanegi* 拵木, acts clearly as a great cantilever, balancing the wide eaves overhang by an equivalent load on the other side of its fulcrum over the wall column. In Tōshōdaiji there are actually two such *hanegi* acting together on each column axis. All the essential framing in this roof is invisible, and has only the most general connection with the supporting members apparent to the eye below. The exterior slope is of course much steeper than before.

The reconstruction of the original cross-section given in fig. 28 shows how different the appearance of the whole building must have been with a roof of the gradual slope proper to the eighth century. I have based this on a comparison with two other buildings which offer close parallels to the Tōshōdaiji "golden" hall. The framing of the area above its chancel must have been solved in much the same way as in the Kuan-yin-ko of Tu-lo-ssū (fig. 30), re-built after a Tang original in the middle of the tenth century.¹⁴⁵ Both possess elaborate decorative ceilings. In the Chinese cross-section the beams visible below the ceiling are of less than structural scale, and support nothing but the ceiling itself. At Tōshōdaiji it seems to me probable that a main girder ran directly above the ceiling, supported at its ends above the columns and at intermediate points by the members rising

¹⁴⁴ No data seems to be available for the early histories of the miniature pagodas of Kairyūōji and Gokurakuin. Tradition holds that they are copies, respectively, of the full-size pagodas of Saidaiji (the Kamakura period Tō-kaidan), and Gangōji; but nothing substantiates this claim, and the first comparison, at least, is stylistically impossible. Such pagodas were used by the revived Vinaya sect, Shingon-riśshū, in the middle ages as a substitute for the Kaidan or ordination altar (cf. note 104). At Kairyūōji ordination ceremonies were held from 1288 on. The miniature may have had some earlier use there, or may have been transferred from another temple. Kairyūōji: Hattori, *N-kenchikushi*, pp. 194 ff.; Amanuma, *Shiyō*, pp. 70 ff.; *Zōroku*, pp. 70-3. Gokurakuin: *Saidaiji-taikyō* ii, pl. 49; *Nihon-kokuhō-zenshū* 國寶全集, lxii, no. 1299.

¹⁴⁵ See above, p. 84, and note 139.

from the visible girder below. At the same points a further girder was raised above the main one, and this held the king-post at its middle.

The problem of the aisles could not be solved merely by removing everything above the rafters and relaying the sheathing and tiles directly upon these in Chinese fashion; the span would be too wide to make such a load a safe one on rafters alone. Here the parallel is given by the "golden" hall of Hōryūji (fig. 20). Both this and that of Tōshōdaiji possess bracketing members which we shall later see are of great importance historically, long slanting timbers like smaller and at least partially visible *hanegi*, which receive the load from the eaves at their outer ends and run up inward to the aisle column line. At Hōryūji a post from each of these runs up to support the rafters halfway across the aisle—and at the same time to balance some of the weight on the outer end of the cantilever. These cantilever members, called by the Japanese "*odaruki*" 尾櫓 and by the Chinese "*ang*" 昂, were undoubtedly part of the original bracketing system of Asuka and Nara buildings (and perhaps the inspiration for the later *hanegi* which imitate their function on a larger scale in the Japanese double-shell roof). The aisle cross-section of Tōshōdaiji should probably be restored to include a strut system like that of Hōryūji, rising from each *odaruki* half-way across the span to help support the rafters. When the entire framing of the roof was altered, the rafters also must have been replaced (as they are in every period of restoration); and since the new ones were to support nothing, and perhaps were even at a different angle from their predecessors, the *odaruki* struts were removed as unnecessary or in the way. This method of supporting the rafters midway across the aisle should be remembered, for it is the germ of the complex later bracketing of Sung, introduced to Japan with the Zen sect.

The lower roofs of the middle gate and "golden" hall of Hōryūji—the former before its recent restoration—have retained the Chinese single-shell system almost intact. The difference from the standard of the Hokkedō and the Hai-hui-tien lies only in the application here of the slanting cantilever *odaruki* which they lack. In the upper roof there is a slight divergence between outer covering and rafters, responsible for a minor increase in roof slope. The framing above the chancel is obviously based on ancient precedent, but the original simple combinations have become blurred and confused. Instead of a single large girder, there are two or more small members running parallel a few inches apart. This is an illustration of a tendency marked in later Japanese roofs, to substitute wherever possible many small-scale members in a sort of scaffolding for the few large ones of Chinese tradition.

THE MULTI-STOREYED PAGODA

The pagoda is exceptional in Far Eastern architecture, as the single important building form of non-Chinese origin. However its general appearance may recall the watch towers of Han tombs (fig. 55), however closely its details may be assimilated to Chinese practise, its existence in the Far East is due solely to the influence of Indian Buddhism; and its presence in any building complex in China, Korea, or Japan is the one sure sign that the group from which it rises is not a palace, or a Taoist monastery, or (normally) a Shintō shrine, but a temple dedicated to a still exotic religion.

In China, and to a lesser extent in Korea, the exceptional function of the pagoda is normally emphasized by its architectural treatment. In existing pagoda remains, the materials almost always found are stone, brick, or tile in contrast to the wood frame-work used elsewhere. The whole pagoda form and its details may be markedly exotic. This is particularly the case in Chinese practise after the Yüan dynasty, through the strong influence of Tibetan Lamaism. From this period date such characteristic monuments, almost completely foreign in conception and execution, as the two pagodas in the environs of Peking which imitate the *stūpa* at Bodhgaya, Pi-yün-ssü 碧雲寺 and Wu-t'a-ssü 五塔寺 or the great white bottle forms which emerge so incongruously from the city's sky-line. The earliest remaining Chinese pagoda, that of Sung-yüeh-ssü 嵩嶽寺 on Mt. Sung in Honan, is also strongly Indian in feeling; while Korea has preserved at Kwontoksa 灌燭寺 an extraordinary anthropomorphic example which recalls Cambodian practise at Ankor Thom.¹⁴⁶

The change from masonry to the timber construction natural in the Far East involves much more than a difference in materials. The great Chinese pagodas built in wood (of which a few remain, like the Liao dynasty version at Fo-kung-ssü¹⁴⁷ in Shansi), are completely assimilated to Far Eastern conceptions of design. This naturalization is more obvious in Japan than anywhere else, since wood is there the only practicable material for large-scale construction. Stone pagodas have been built in Japan at all periods since the introduction of Buddhism, but at small scale and in the simplest possible forms.¹⁴⁸ The wooden Asuka pagodas of Hōryūji (fig. 5), Hōrinji, and Hōkiji are in building technique and details almost identical to the Hōryūji Kondō or middle gate. Each storey, isolated from the rest, is a small building completely in Chinese tradition, with the standard combination of pillars, beams, bracketing, rafters, doors, and windows which must have been inevitable on the continent at least since Han. The one still exotic element is the spire; and even here there is nothing like a reproduction of Indian forms, but a transformation of each into properly Far Eastern terms.

Pagoda design in Japan in its essentials is already standardized in the Asuka period. From the seventh to the eighth century, there is an evolution in details, which perfectly parallels that seen in other building forms (fig. 62). In the Nara period, these also are crystallized; so that the subsequent history of the multi-storeyed pagoda, with a very few exceptions, is merely the reproduction of one inevitable type with a gradual coarsening of taste. Large scale and smaller monasteries are equipped with square pagodas of five and three storeys, respectively. Seven-storeyed examples were built at the height of early ambition (Tōdaiji, Gangōji) and even nine-storeyed (Kudara-no-ōtera) but none of these has survived. Each storey consists, in remaining examples, of three bays on a side, treated as an axial doorway and flanking windows. In the upper storeys, these are all purely decorative (like the small balcony and railing which runs outside), since the interior space is never used. On the ground floor, the pagoda may be entered; but one door only is used,

¹⁴⁶ Tokiwa and Sekino, *Buddhist Monuments* v, pls. 139-42 (Peking); ii, pl. 140 (Sung-yüeh-ssü). For Kwontoksa, cf. Eckardt, *History of Korean Art*, London and Leipzig, 1929, fig. 139, p. 106.

¹⁴⁷ *Shina-kenchiku* (in series *Sekai-kenchiku-shūsei* 世界建築集成, Tōkyō, 1929, i, pl. 45, p. 31.

¹⁴⁸ Amanuma, *Zūroku*, pp. 54-5, 182-3, etc.

and the windows are not needed for light, so that frequently the window latticing is blind, and on the interior both door and false window surfaces are used for paintings. Each storey is crowned by bracketing, of the most formal and complete type practised in Japan, which varies only in size from one eaves system to the next above. From the apex of the highest roof rises the spire which is the pagoda's clearest link with India. Chinese spires may vary widely; in Japan only details and proportioning have changed between the seventh century at Hōryūji and the nineteenth in the Tokugawa tombs at Nikko.¹⁴⁹ There are two base elements, the lower square and called *rōban* 露盤, the upper domical (later cylindrical) and called *fukubachi* 伏鉢, crowned usually with a cresting of lotus petals. Out of this rises the mast, with its nine disks, the *kurin* 九輪; then comes a sort of pierced aureole, the *suien* 水煙; and at the very top are two finials, the lower the "dragon wheel," *ryūsha* 龍車, and the upper the "pearl," *hōjū* 寶珠.

The pagoda interior consists merely of an aisle around the four inner columns, *shitenbashira* 四天柱. Between the latter are placed whatever icons the pagoda enshrines for worship: at Hōryūji four remarkable scenes like stage sets on the four sides, illustrating by small clay figures episodes from the scriptures; in later examples, usually an altar with images. The central shaft, which rises the whole height of the construction to support the mast, may be hidden entirely on the ground level, as at Hōryūji, or may be merely encased and used as a surface for paintings, as in the later pagoda of Daigoji. The all-important relics are placed in a socket hollowed out of the stone base of this central shaft; and hence in the building of any pagoda were formally deposited before actual erection could begin.

The transmission of the pagoda type seen at Hōryūji from the Asiatic continent to Japan involves no stylistic problems. The imitations of wood pagodas carved out of rock at Yün-kang (and dating in the last quarter of the fifth century) are of the same basic type, despite the difference of date and location and the difficulties posed by the material.¹⁵⁰ The largest remaining from this period are those which act as a sort of central pillar to support the cave ceiling. In this case the type shown is more elaborate than that standardized in Japan, since each storey is provided with a colonnaded porch, instead of a balcony only (fig. 19). It may be imagined that the great pagoda of Yung-ning-ssü at Lo-yang, erected in 516, was of such a monumental form.

The great difficulty comes in attempting to link the Far Eastern pagoda formula, with its tiers of wood-framed roofs surmounted by a spire, to the practises of Buddhist architecture in India. No contrast could be more extreme than that between the Hōryūji pagoda and an early *stūpa* form like that at Sāñcī, all one tremendous dome, resting almost on the ground and crowned by a relatively low mast.¹⁵¹ Even the later *stūpa* forms seen, for example, in the Ajanta caves, where the dome is raised on a high cylinder (fig. 101), have no stylistic contact with the multi-storeyed pagoda. Indeed, it may be proved that they lead, instead, to the creation of a quite different Far Eastern type, the Tahōtō 多寶塔 (figs. 102, 103) which appears in Japan only in the ninth century.¹⁵² The problem is too

¹⁴⁹ *N-shaji-shiryō*, pp. 4-5, gives comparative pagoda spires.

¹⁵⁰ Tokiwa and Sekino, *op. cit.*, ii. pls. 21, 26, 48.

¹⁵¹ Cf. Fisher, *Die Kunst Indiens Chinas u. Japans*, Berlin, 1928, pp. 151 (Sāñcī), 175 (Ajanta).

¹⁵² See below, pp. 194 ff.

elaborate to be discussed here in any detail. Solution must follow the evidence for the existence, in India itself, of multi-storeyed erections comparable to the pagoda in form, and linked, somehow, to the original hemispherical *stūpa*, in their religious purpose. An obvious link is furnished by the great "*stūpa*" erected by the Kushan monarch Kaniška in Peshawar, presumably at the end of the 1st century A. D. As described by Chinese pilgrims, this was of wood construction in 13 storeys, crowned by an iron mast with superimposed disks;¹⁵³ details and dimensions vary widely from one account to another, but there can be little doubt that this sort of tower could have been easily translated into Chinese terms to produce the typical Far Eastern Pagoda. How the multi-storeyed type grew in India from the Sāñcī dome is a further question, which may (fortunately) be dismissed as irrelevant to my present purpose.

The monotonous regularity with which Japanese builders have repeated their one multi-storeyed pagoda type for more than a thousand years, may be explained at least in part by a question of construction. The pagoda or *stūpa* is essentially a monument, with no problem of providing interior space for human use. As such, its general evolution in Buddhist countries has been a sculptural one, toward a richness and variety of form expressed naturally in terms of masonry architecture. The wide repertory of forms found in China, and especially the Chinese fondness for designs based on an octagonal ground plan instead of a square, have been easily carried out in brick and stone. They would have been far more difficult to build in timber alone; and so it seems quite natural that there should be far fewer wooden octagonal pagodas in China—known by textual references or by existing remains—than those built in a masonry technique. In Japan there has been no masonry tradition to provide an outlet for the desire to create new and more elaborate forms, except in the minor field of the grave monument proper; and Japanese wooden architecture has held resolutely to the right angle in plan, as a first principle of natural construction. The two historic waves of Chinese influence have produced only two important instances of deviation from the general rule. The enthusiasm for the forms of Southern Sung architecture which was stimulated by the Zen sect from the beginning of the thirteenth century, was responsible for the single octagonal pagoda remaining in Japan, that of Anrakuji 安樂寺 in Nagano-ken, erected in late Kamakura or Muromachi. The earlier impulse to imitate Tang fashions led in this department to failure. There is good evidence to show that the original scheme for Saidaiji—so strongly Chinese in its decoration—included the completely exotic idea of octagonal pagodas. Work seems to have been started on

¹⁵³ Cf. Adachi, "A Note on the Ch'iao-li-fu-t'u" (in Japanese), *Kokka* 479-82. A comparison of the various descriptions has convinced Adachi that the original Kaniška *stūpa* was burned down, and thereafter was rebuilt several times in approximately its first form, with square storeys framed in wood. He believes that in the 7th century, however, another rebuilding took place in stone, which altered the plan to a circle. It was this new form, quite unlike the earlier, which was described by Hsüan-tsang (for which cf. T. Watters, *On Yüan Chwang's Travels in India*, London 1904, pp. 203 ff.). Something of the look of this type of lofty, multi-storeyed tower must be given by the so-called Kumrahār placque, supposed to be a representation of the early Bodhgayā, and dated by the style of its inscription in the early 2nd A. D. or earlier (Coomaraswamy, *La Sculpture de Bodhgayā*, *Ars Asiatica* xviii, Paris 1935, pl. lix, p. 24).

one of these, and then halted because of the technical difficulties involved. Finally the whole design was abandoned in favor of the familiar square form.¹⁵⁴

EXTERIOR AND INTERIOR BUILDING ELEMENTS

The major elements comprising the typical Japanese icon hall at any period, will be introduced below in their Asuka and Nara forms under a series of sub-heads. The order of their discussion will follow a general division into forms visible first on the exterior and then on the interior, arranged in as logical a sequence as possible by their position and importance. It should be understood that any such division is to a large degree arbitrary. Certain elements, like the outside shell of the roof, or the ceiling, are purely exterior or interior in function; in a wide intermediate class, no clear distinction exists. This is

¹⁵⁴ A convenient summary of early Chinese pagoda types is given by Pao Ting 鮑鼎, "Pagodas of the T'ang and Sung Periods" (in Chinese), *Bull. of Soc. for Research in Chinese Archit.* vi/4, June '37. The Saidaiji pagodas have been discussed by T. Itabashi 板橋 in "Notes sur l'histoire des temples bouddhiques du Japon" (in Japanese), *Tōyō-bijutsu* i, April '29; and (in fuller detail) by Adachi, "Stūpa à sept étages, huit angles dans Saidaiji," *ibid.* xii, July '31. The story which forms the nucleus of the evidence for the original scheme is first retailed in the early 9th century *Nihon-reiki*. After the death of the Minister of the Left, Fujiwara no Nagate 永手 (in 771/2), his son Ieyori 家依 fell gravely ill. Being subjected to the ritual of exorcism, the latter suddenly had a vision of his father in hell, saying to him,

"I am Nagate, who commanded that the Hokkeji standards be taken down, and who later had the octagonal pagodas of Saidaiji made over into four-sided ones and their seven storeys diminished to five. For those sins I was haled to the dungeons of King Emma, and have been made to embrace a red-hot pillar . . ."

Further details are given in the *Tōsai-zuihitsu* 東齊隨筆 of Ichijō Kaneyoshi 一條兼良 (1402-81); Nagate is said to have objected to the needless expense involved in the scheme. From this, various statements in the *Shoku-nihongi*, and a rather cryptic sentence in the Saidaiji section of the *Shōji-engishū*, Adachi concludes that the western pagoda was begun around 767 on an octagonal plan; and then in a year or so was pulled down and started afresh as a square. As if in confirmation, the platform remains of the only pagoda still traceable at Saidaiji—built on a new site in the 13th century, but apparently with old stones (see note 104)—has an eight-sided central pillar base, otherwise inexplicable.

In the late 8th century *Enryaku-sōroku*, written by Chien-chên's Chinese disciple Ssū-t'ō, an autobiographical section contains the sentence,

"In the Keiun era (767-69), was Imperially commissioned to Saidaiji, to make an octagonal pagoda design 造八角塔様"

Itabashi thinks that this refers to the project for the temple itself, and that Ssū-t'ō was chosen as a consultant architect because of his personal knowledge of Chinese forms. Adachi prefers to believe that the "design" 様 meant a small model, and is more likely to have been the object recorded in the temple inventory as standing inside the Four Kings' hall, an "octagonal five-storeyed pagoda, with a wood spire . . ."

It is possible that the Saidaiji scheme had a much more modest prototype in Japan itself at Gangōji. The latter's square five-storeyed pagoda was one of the landmarks of Nara, balancing its neighbor in Kōfukuji. A very late history of the temple, the *Honchō-buppō-saisho-nanto-gankōji-yūrai* 本朝佛法最初南都元興寺由來, dated 1602, records the presence in the original layout of a second pagoda, octagonal and two-storeyed; which it claims was first erected at the capital of Fujiwara in the late 7th century, and in the final Nara establishment was dedicated in 757 (*D-n-b-zensho*, *Jishi-sōsho* ii, 154). This need not have been much more difficult to build than a single-storeyed octagonal hall like the Yumedono; but it is rather suspicious that no earlier text mentions this "Small Pagoda Precinct."

particularly the case with those forms which make up the outer enclosure of the building. In the masonry architecture of Europe, in which the mass of the wall itself furnishes support, it is often possible to treat exterior and interior as quite unrelated surfaces of decoration; a Renaissance spacing of columns or pilasters on the facade may have no counterpart or be flatly contradicted within. In the wooden architecture of the Far East, most purely exemplified in Japan, the wall is merely a curtain between structural supports. In Japanese buildings, the enclosure proper may be the width of a single plank, or expanded by no more than a thin coat of plaster on one or both sides. Not only columns, but all other important structural elements supporting or bracing the curtain—lintels and beams, door and window frames, bracketing in the wall plane—are visible from both sides in the same form. A close relationship may exist even outside of the wall plane, between the exterior and interior designs of a complex system of bracketing; even the transverse beams of the interior frequently emerge on the facade in structural or decorative forms. In the Chinese construction used in the Asuka and Nara periods, the absence of a flat ceiling may permit the form of the roof itself to be expressed in the strongest terms inside. This principle of building gives to Far Eastern architecture a visual unity greater even than that of Gothic in the West, capable of division only in terms of convenience.

The series begins with bracketing, as the most important single element in the appearance of the exterior (barring the roof), and the one whose unfamiliarity and frequent elaboration requires most thorough treatment.

For the sake of clarity, I preface the discussion of bracketing in buildings of the Asuka period with an analysis of the structural principles of bracketing in general in the Far East. This systematization, proceeding from the simple to the complex, probably reflects in very broad lines the historical evolution of the element, so far as the latter may be determined by available evidence. As will be apparent, however, it is only in this most general sense a chronological arrangement.

BRACKETING; SCHEMATIC DEVELOPMENT:

a. Post and Lintel:

The most primitive and undoubtedly the original stage in the Far East. It is found in the archaic types of Shintō shrine as an evidence of pre-Buddhist practise in Japan; it has continued in much later Japanese shrine and palace architecture (fig. 99), partly through conservative tradition and partly because the general lightness and simplicity of such buildings require no more elaborate device.

b. Bracketing in the Wall Plane:

The earliest form was probably an unshaped timber introduced horizontally between post and lintel to lessen the span of the latter. Given the general outline shown in fig. 45, this has been a standard motif of simple architecture in Japan down to the present day, under the name "*funa-hijiki*" 船肘木, or "boat-shaped bracket." There is no evidence to show whether such use predated the introduction of Buddhist architecture. The same form is occasionally found in early Chinese construction, as a survival among the more sophisti-

cated systems there popular at least since Han; and this makes probable its Chinese origin.¹⁵⁵

A more complex single addition to the post and lintel is the capital, a block normally square in plan, the lower half of which is moulded to reduce its width to that of the column head (fig. 46). The general form suggests the Doric capital; but whereas the latter separates clearly into two halves, a square abacus above and a round echinus providing transition to the column below, the Far Eastern cap is square throughout. The use of such an element in Chou dynasty China is apparently attested by literature.¹⁵⁶

Actual Han remains prove the development at that age of higher types, and specifically of the standard bracketing unit characteristic of all later architecture in the Far East.¹⁵⁷ This is a three-fold combination; the capital at the bottom, supporting a long arm like the "boat bracket"; and the latter, in turn, holding three smaller bearing-blocks, like reduced capitals, evenly spaced to give support to the roof purlin above (figs. 47, 55). Concrete Han evidence, in miniature tomb buildings of pottery and the stone tomb pillars of Ssü-ch'uan, may show the combination in its typical later form, or with only two bearing-blocks, and thus proves that standardization at that time was not yet complete. It should be remembered that whereas the successive members of stone architecture in the West—e. g., the Doric order—are related only by superposition, each arm or beam in Far Eastern bracketing is inserted into the block below it. Junction between capital and column top is provided, as in the Greco-Roman tradition, by dowel and socket.

c. Bracketing in the Transverse Plane:

So far, the roof has had no support outside the wall plane except its own rafters. In this and more complex systems, additional longitudinal support for the rafters is given by an eaves purlin some distance away from the wall. The simplest means of holding this purlin is by an outward extension of the main interior girder over each column; a technique

¹⁵⁵ E. g., cave 82, Tun-huang (Pelliot, *Grottes*, pl. clxxi), has above its obviously T'ang icons a canopy supported by six pillars holding simple brackets of the same type, which may well be T'ang also (since the form disappears in later Chinese practise). Inside the roof of the Kuan-yin-ko of Tu-lo-ssü, several similar members are used upside down as blocks to hold the main girder ends (fig. 30). Here their present use has nothing to do with their shape; Liang (p. 76) calls them *to-tun* 花檣, and suggests that they belonged to the original T'ang pavilion which was rebuilt in 984, being so re-used because they were invisible above the ceiling.

¹⁵⁶ Justification for this belief lies in the phrase 山節藻梲, "mountain *chieh* and pondweed kingposts," as a symbol for reprehensible extravagance in the *Lun Yü* and *Li Chi* (see above, p. 10, and note 19). In the *Ying Tsao Fa Shih* encyclopedia, i, a historical glossary of architectural terms makes *chieh* equal to *tou* 料, the normal later term for capital.

¹⁵⁷ Cf. "The Architecture of the Han Dynasty" (in Chinese), by Pao Ting, Liu Tun-tsêng, and Liang Ssü-ch'êng, *Bull. of Soc. for Research in Chinese Archit.* v/2, Dec. 1934, pp. 13 ff.; Hamada, "A Comparison of the Architectural Forms of Hōryūji with Those of the Han and 6 Dynasties" (translated from Japanese to Chinese by Liu Tun-tsêng), *Bull.* iii/1, March, 1932, pp. 1 ff. General discussions of the evolution of bracketing appear, from the Chinese side, in the appendix by Liu to his translation cited above; from the Japanese, in Sekino T.'s *Nihon-kenchikushi-kōwa* 日本建築史講話, Tōkyō, 1930, pp. 232 ff. and fig. 2; and Kawakatsu's 川勝 *Kokenchiku-nyūmon-kōwa* 古建築入門講話, Kyōto, 1935, pp. 46 ff., figs. 24-32.

used in the Nara period Shōsōin, and normal in storehouses of the same log-cabin *Azekura* type, to which its sturdy directness is appropriate. Its main disadvantages, which have prevented more extensive use, are four. The demand it makes on additional length of girder can be met conveniently only in buildings of moderate depth; its limiting of purlin support to the column axes requires either a very large purlin or a close column spacing; it makes no provision for raising the eaves above the girder level; and its large scale and simplicity are incompatible with a facade design of any decorative richness.

A more developed method, still providing support only in the transverse sense, is found in Kamakura period buildings of the so-called "Indian" style.¹⁵⁸ Instead of a girder extension, there is here a series of bracket arms, each projecting a step farther than the one which supports it below, and the topmost holding the purlin (figs. 113, 114). One or more of these may still be the extension of an interior beam, reduced to bracket scale. A further characteristic of this system alone is that the arms—running inward as well as outward—are inserted in the body of the column, instead of building above its top. In Kamakura use the technique was undoubtedly an imitation of contemporary, Sung dynasty, practice in China, perhaps confined to one locality. The principle may be still seen in provincial South Chinese architecture of recent date. This proven tenacity of tradition, and the comparatively primitive character of such bracketing, suggest that its origin goes back much farther than Sung and Kamakura.

As will be seen in the chapter on the "Indian" style, the system can have been used in its pure form of transverse support, only under the eaves of buildings of moderate size. At larger scale, constructions otherwise completely in the "Indian" style provide a needed widening of purlin bearing by the use of longitudinal bracket arms in their final step; and where an unusual width of intercolumniation demands, may even insert another form of purlin support between the column axes (fig. 114).

d. Bracketing in Both Planes:

A terminology is necessary for clear explanation of the complicated systems coming under this head. The word "tier" will thus be used below to describe a level, changing in the vertical sense, and "step" to describe a horizontal extension, inward or outward. In the building's transverse sense, corresponding to a succession of steps, will be distinguished first the wall plane, and then a first, second, third, or fourth inside or outside the wall.

All of these systems, with the exception of the derivatives of the "Indian" style cited above, mount in remaining architecture from a capital at the top of the column. Into this are inserted crossing bracket arms of approximately the same length, each with its complement of bearing-blocks (fig. 48). The system may stop at this point, at the first stage of development; the bracket in the wall plane supporting a wall purlin, while the transverse arm at its outer end supports an eaves purlin or transverse girder (consideration of the interior bracketing will be postponed until a later paragraph). Here again the concentration of support for the eaves purlin at the column axes only, is applicable to buildings of small scale, or to roofs of a material lighter than tile. A second stage is more usual, in which the transverse arm holds at its end a longitudinal one (of the same length as that in the wall

¹⁵⁸ See below, pp. 219 ff.

plane), thus giving a wider, three-point bearing for the purlin (fig. 49). This is a one-step, two-tier system. By it the eaves purlin is raised a tier higher; some device is needed to raise the wall purlin to the same level. The lower arm in the wall plane may hold another arm, of equal length, which in turn holds the wall purlin; or instead, the lower arm may hold an intermediate bracing beam, which transmits support to the purlin through regularly spaced bearing-blocks. At this comparatively simple stage, with a space one step wide between eaves and wall purlins, the rafters over the interval are usually left exposed.

Han and early Six Dynasties miniature buildings often show the one-step, two-tier system, presented with the abbreviations necessary to their pottery technique. So far as their evidence is concerned, Han bracketing never went beyond a single outward step, no matter in how many tiers it might rise (fig. 55). Whether or not this was the whole extent of Han practise is uncertain. The models represent buildings of second or third importance; for those of the first class, like the great Han palace halls, contemporary texts suggest an impressive repetition of mounting tiers, which may have involved further outward steps. The most elaborate of such descriptions is that of the hall interior given in the *Lu Ling-kuang-tien Fu*:

"The myriad columns stand densely crowded, strong in their mutual supporting. The king-posts, at their great height, are like the suspended stars (in multitude), soaring perilously aloft (without foundations on which to stand secure). The cross-beams arch upward like rainbows, rising high (to span their intervals). The bearing-blocks mount tier on tier to dizzy summits; the curved bracket arms meet in series, forming chains (about the interior of the hall). Fungus-shaped supports crowd together in great numbers; the branch-like props are forked, and braced aslant. On each side (the construction) juts outward in transverse projection; (each member) as it emerges supports the next. Below, all rise luxuriantly, shimmering with ornamentation; above, all mount precipitously, bound together in one tier over another. The succession is like an overlapping of fish scales; (the various parts) are distributed and set out in perfect continuity, up and down and across, while at the same time each has its individual interest."¹⁵⁹

However one may interpret such complexity in Han times, in later bracketing practise the single step outward never involves more than two tiers. An increase in height beyond this stage always means a corresponding increase in projection.

Combinations of longitudinal and transverse bracketing, made up of horizontal arms, must have been standardized by the T'ang period. Clear evidence of T'ang practise in buildings of moderate size is afforded by the incised drawing of a Buddha hall on the lintel of the Ta-yen-t'a pagoda 大雁塔 in Hsi-an-fu, dated probably at the outset of the eighth

¹⁵⁹ 萬櫨叢倚磊砢相扶浮柱崑崙以星懸漂颯而枝柱飛梁偃蹇以虹指揭蓬蓬而騰湊層櫨崑崙僊僊以岌岌曲桯要紹而環句芝栴攢羅以戢翬枝棼棼而斜據榜天蟻以橫出互黝糾而搏負下崑崙以瑾錯上崎嶇而重注捷獵鱗集支離分赴縱橫駉驛各有所趣。

(In translating this extremely difficult *fu* style, I have followed the interpretations of the T'ang commentators, principally Li Shan 李善, Li Chou-han 李周翰, and Lü Hsiang 呂向, as well as those of the Sung editor of the *Ying Tsao Fa Shih*, Li Chieh 李誠, who quotes the selection several times in his glossary).

century (fig. 50).¹⁰⁰ The system here is two-step, three-tier; the wall purlin is raised to the same level by a duplication of the complex of capital, longitudinal arm, bearing-blocks, and beam.

The possibilities of such combinations were carried to an ultimate stage of complication in the late T'ang style continued under the Liao. The lower storey bracketing of the Kuan-yin-ko pavilion, of Tu-lo-ssü in Chi-hsien, rebuilt in 984, is a four-step, five-tier system (fig. 30). At the stage even of the Ta-yen-t'a drawing, the only longitudinal arms are those in the wall and eaves purlin planes. At the stage typical of Liao, a third plane of longitudinal support is introduced between these, with a consequent marked increase in complexity. There are typically three tiers in such an intermediate plane, whose treatment usually follows that of the wall plane; the lowest is a longitudinal arm of normal size, the next a longer arm, and the top a bracing-beam. Between the three planes, the rafters may be exposed, or hidden by boarding between the topmost beams and purlins. The design at this point in the Kuan-yin-ko, oldest of Liao remains, is closest to the T'ang formula which we shall see below in its standardized Japanese version (fig. 53). Between the wall and intermediate planes, the boarding forms a flat soffit, supported by parallel transverse strips; this corresponds to the typical Japanese *noki-tenjō*, 軒天井 or "eaves ceiling." Between the wall and eaves purlin planes, the boarding slants upward, with the same strip subdivision. In the Japanese formula, which must represent a purer T'ang design, this *noki-shirin*, 軒支輪 or "eaves stripping," has the long, curving contour of an Ionic cyma; the survival in the Kuan-yin-ko has become merely a diagonal plane.

So extreme a development of the principle of bracketing by horizontal members only as that seen in the Kuan-yin-ko, seems to represent a sort of backwater unrelated to the central currents of architectural history. Subsequent Chinese practise, in the Imperial styles from Sung on, made its almost inescapable standard a different and even more complex principle, already orthodox in T'ang and as such incorporated into early Japanese Buddhist architecture. This was a system formed by the addition to the normal horizontal framework of a primary bracketing member, running down at a slant roughly parallel to the slope of the roof.

Such a member—*odaruki* in Japanese terminology, *ang* in Chinese—occurs in all remaining Asuka monuments (fig. 51). As the cross-section of the Hōryūji "golden" hall shows, its function is that of a long lever arm (fig. 20). The outer end takes the weight of the eaves overhang, transmitted through a longitudinal arm providing a wide bearing for the purlin. The fulcrum of the lever is the wall column and the system of beams and bearing-blocks above it. In the lower roof of the "golden" hall, where the principle receives fullest application, the inner end of the lever arm is anchored by the framework above the interior column plane; and at the same time a downward thrust from the purlin over the aisle helps to balance that exerted by the eaves.

As will be seen below in the section devoted to Asuka bracketing proper, the lever technique in the monuments of that period seems at a comparatively early stage of development, not yet utilized with full efficiency, and not yet assimilated to the normal framework

¹⁰⁰ Cf. Tokiwa and Sekino, *Buddhist Monuments*, i (text), pp. 6-7. The pagoda has been frequently restored; the lintel probably dates from its first extensive rebuilding, in the Ch'ang-an period (701-705).

of bracketing by horizontal members. In the T'ang style reflected in Nara monuments, the two principles of diagonal and horizontal bracketing were brought into a visually harmonious combination (figs. 52, 53). In the Sung style reflected in Japanese temples of the Zen sect from the thirteenth century on, the possibilities within the principle of structural efficiency were combined with a high degree of decorative elaboration (fig. 54).¹⁶¹ In the Ming and Ch'ing styles, almost without influence on Japan, the whole lever principle was abandoned, its forms being retained merely as a conventional eaves ornament, at small scale. In Japan, as we shall find later, both the T'ang and Sung versions have been continued until the present day, almost without change in their appearance of structural usefulness. The development in the Heian period of a system of roof construction entirely different from the Chinese, however, from that time deprived the form of at least half its structural significance; so that its continued use has been due rather to ecclesiastical conservatism than to any functional value.¹⁶²

The origin of the lever arm principle in Chinese bracketing is a problem of great interest still unsolved. I have heard that Mr. Liang Ssū-ch'êng, of the Society for Research in Chinese Architecture, discovered a North Wei slab indicating its use, shortly before that society was dispersed by the progress of Japanese measures to ensure peace in the Far East. It is otherwise without known representation in the Six Dynasties period. This may be a result merely of the character of remaining evidence from the time. A member so aggressively transverse as the lever arm would have been impossible to represent in the tomb paintings of Korea, and difficult to execute in the stone miniatures of the Chinese caves. It is absent from Han building models, perhaps for the same technical reason, or possibly because these represent buildings of secondary importance; T'ang practise seems clearly to have reserved its use for architecture of monumental scale, in which its aid was necessary in supporting the great weight of wide overhanging eaves. One mention in literature seems good evidence of its existence at least by the period of the Three Kingdoms. The later Chinese name for the lever arm, standard in the Northern Sung architectural manual *Ying Tsao Fa Shih*, is the *ang* 昂. The *Ching-fu-tien Fu* 景福殿賦, a description of the Wei palace Ching-fu-tien, by the third century poet Ho Yen 何晏, says: ¹⁶³

"The flying *ang* are like birds hopping. Paired shafts are their support; narrowing as they go, they leap across to their connection. . . ."

Granting the exuberance of the *fu* style, this might easily pass as a description of some decorative form of lever arm, perhaps with the longitudinal bracket which it supported carved to represent wings. The "paired shafts" must have served as the fulcrum, above the top of the column proper. The latter term may signify a motif which will be taken up below, a support in the shape of an inverted "V," formed by two timbers joining under a common bearing-block. In some Korean tombs, this is regularly spaced in a sort of frieze above the normal column-top bracketing (fig. 56).¹⁶⁴ In one rare example, it is

¹⁶¹ See below, pp. 232 ff.

¹⁶² See below, pp. 154 ff.

¹⁶³ In *Wen Hsüan* xi. 飛昂鳥踊雙轆是荷赴隘凌虛獵捷相和.

¹⁶⁴ Cf. Hamada, *op. cit.*, *Bull. of Soc. for Research in Chinese Archit.*, iii/1, fig. 2. The "vaulted" tomb is that of the "Celestial Kings and Earthly Spirits" 天王者神, in Junsen-gun, Hokusō-men 順川郡倉北面.

used to provide (painted) imposts for a sort of vault (fig. 57). Thus it is not impossible that a lever arm in the Ching-fu-tien may have rested on such a support, perhaps separated from the column top by several tiers of some other form of bracketing, in the wall plane. This would have been a fulcrum more elaborate than that seen in the Asuka style; but the Han fu in general suggest a barely disciplined richness of sculptural forms in architecture, from which the development into T'ang style seems to have meant a general increase in sobriety.

The *Ching-fu-tien Fu* is not wholly satisfactory as evidence for the lever arm because its T'ang editors disagree on the meaning of "flying *ang*." One commentator, Chang Hsien 張銑, makes it equal to *yang ma* 陽馬, a term itself of somewhat dubious purport, which in the *Ying Tsao Fa Shih* glossary (i) is explained as the beam supporting the corner of the eaves. The other, Li Shan, says, "Nowadays people call the bracketing of a four-slope (hip) roof *chien-ang* 欂栌." The author of the *Ying Tsao Fa Shih*, an architect as well as a scholar, accepts the latter interpretation.¹⁰⁵ He makes perfectly clear what he thought the "flying *ang*" was; at the same time, he gives the same meaning to the character *chien* 欂 as well. With this authority, it is possible to find another reference to the lever arm in the *Ching-fu-tien Fu*:¹⁰⁶

"Capitals of fragrant wood rest thickly crowded above one another, set out by (the architect's) square. Lever arms, *chien*, and their bearing-blocks, at a perilous height, give mutual support; curving brackets stretch out to join their neighbors."

The translation of descriptions of Han architecture is always dangerous. Terminology is usually different from that of later periods; the T'ang commentators often contribute no light, and may even contradict each other. I know of no instance, however, in which a character used to describe one member in Han can be proved to have meant another in Sung. Thus it is probable that *ang* meant the lever arm in both periods, as the *Ying Tsao Fa Shih* states. Li Shan's comment has a further interest in substantiating an association seen in actual remains. The lever arm, as the climax of bracketing science, was used in T'ang in buildings of major importance, which because of their rank were also given hip roofs. The combination, for example, is that of the "golden" hall of Tōshōdaiji.

e. Intercolumnar Bracketing:

The development of a form of bracket at the level of the complexes springing from the column tops but between them, is one of the chief features of Chinese architectural history. The two systems were at first separate, and different in form. Intercolumnar brackets were often omitted entirely; where used, they were until late T'ang much simpler than the others, and furnished support only in the wall plane, to the wall purlin or a bracing beam below it. The evolution of style from T'ang to Sung brought a gradual increase in the complexity of the intercolumnar unit (fig. 30); until in mature Sung design this was exactly like those over the columns, and supported the eaves in the same way

¹⁰⁵ Chang Hsien: 飛昂陽馬也; *Ying Tsao Fa Shih*, i: 陽馬屋四角引出以承短椽者; Li Shan: 今人名屋四阿拱曰欂栌也 (see also under 飛昂 in *Fa Shih*, i, where Li Shan is quoted).

¹⁰⁶ 於是蘭栴積重簍數矩設欂栌各落以相承樂拱天矯而交結。

(fig. 54). Later development in China multiplied such units still further, while decreasing the scale of the whole bracketing system, until the effect of a continuous cornice decoration was reached in Ming. In Japan the T'ang formula was used without important changes until the thirteenth century, and then continued side by side with the Sung system, introduced by Zen.

Continental precedents for intercolumnar bracketing in the Asuka period are attested by good evidence in China and Korea.¹⁰⁷ The repertory of forms seems to have been limited to two: a simple short strut, crowned by a bearing-block, and the inverted "V" already mentioned (figs. 19, 56); rarely occurring in combination, with the strut at the middle of the "V." In its Six Dynasties form, the early principle is seen often at Yün-kang, for example, in miniature facades of halls or pagodas cut in stone, beneath whose eaves are alternating column-head and intercolumnar brackets; the former a longitudinal arm topped by three bearing-blocks, the latter an inverted "V." Han remains show nothing clearly identifiable as an intercolumnar bracket, but it is possible that the existence of the form at that time may be inferred from a phrase in the *Lu Ling-kuang-tien Fu*, written in the second century A. D. but purporting to describe a hall of the second B. C.:

"The bearing-blocks mount, tier above tier, to dizzy summits; the curved bracket arms meet in series, forming chains (about the interior of the hall). Fungus-shaped supports crowd together in great numbers; the branch-like props (*chih ch'êng* 枝撐) are forked, and are braced aslant" ¹⁰⁸

The association of *chih ch'êng* with the other objects mentioned before it, suggests at least that the phrase refers to a bracketing member. Its description seems to point to the inverted "V," even more clearly than the "paired shafts" of the *Ching-fu-tien Fu*.

Existing remains in Japan give an obviously incomplete impression of intercolumnar bracketing in early Buddhist architecture. The feature is entirely absent from the eaves of the Asuka buildings still extant—probably because it was unnecessary at their small scale. The intermediate inverted "V" makes its appearance at Hōryūji, but in the bracketing of balconies instead (where it alternates with the three-headed arms set above the columns, as at Yün-kang; fig. 59). In remaining Nara period architecture, the only intercolumnar units are struts. For China proper, on the other hand, the Tun-huang wall paintings prove that the "V" was transformed in the later T'ang period into a curvilinear motif.¹⁰⁹ Reflections of this continental development exist in the Nara style; not in the eaves bracketing itself but in a use of the same motif as a support above a cross-beam (fig. 66). The "V" made curvilinear turns up in eaves bracketing for the first time in the Heian period, with an ornamental form which justifies its Japanese name *kaerumata* 慕股, or "frog's legs" (figs. 85, 104). Thereafter its evolutions can be traced in a steady line to the end of Japanese architectural history, as a feature of great importance in enriching the facade. The sporadic character of its early appearances in Japan is probably due in part to accidents of preservation.

A unique form of intercolumnar support is found in the "Indian style," used in bays

¹⁰⁷ Cf. Okumura 奥村, "Development of the *Kaerumata*, a Kind of Brace in Chinese Architecture" (in Japanese), *Bukkyō-bijutsu*, xiv, Nov., 1929, pp. 41 ff.; Hamada, *op. cit.*, *Bull.* iii/1, figs. 2, 3.

¹⁰⁸ Cf. Pelliot, *Grottes*, pls. xxiii, xxxviii, lii, etc.

of wide span.¹⁶⁹ The columnar bracketing of this style, as I have said, is based entirely upon horizontal, and almost entirely upon transverse, members. The intercolumnar system, instead, makes use of the slanting lever arm in its simplest form; a sturdy timber without braces of any kind, resting on a simple fulcrum in the wall plane, and balancing, at either end, the weights of the eaves and aisle purlins (fig. 114). The terse directness of the method, and its utter lack of visual coördination with the horizontal bracketing on the column axes, make it seem much older than its first appearance in the late twelfth century in Japan. Traces of the same idea are found in more orthodox bracketing among earlier Chinese remains. Detailed study in a later chapter will show the logic of its use in supporting particularly the purlin over the aisle.

Interior bracketing is much wider in its range of variation than exterior, and hence cannot be reduced to any simple, general scheme of explanation. One whole set of problems are posed by the interior columns, and the transverse and longitudinal beams—with or without ceiling—which they support. Here the widest differences exist, and can be best studied only in individual cases. The wall columns are more amenable to general classification. In the column-head bracketing above them, the members projecting into the interior are of two sorts: horizontal arms in one or more tiers, to help support the aisle girders; and (if they are used at all) lever arms slanting upward to push against the aisle purlin. The use in the Sung dynasty and thereafter, of an intercolumnar system substantially identical in form, is less excusable on the interior than on the exterior; since the intercolumnar unit has no aisle girder to tend, its horizontal arms are (at least in part) a functionally meaningless concession to theoretical symmetry, and thus hold only a series of light longitudinal bracing-beams (fig. 54).

BRACKETING OF THE ASUKA PERIOD:

The Asuka system, almost identical among existing remains, is given most elaborate use in the "golden" hall of Hōryūji. Here, as I have said, it shows a state of incomplete development in design, since the forms used on interior and exterior are entirely different.

The interior bracketing of the Kondō—i.e. primarily that above the interior columns—is of the orthodox type already attested by Han architectural models (figs. 20, 58). Into the capital, *daito* 大斗, above each column are set crossing horizontal arms, *hijiki* 肘木. These, through their bearing-blocks, *makito* 卷斗, support the main longitudinal and transverse beams of the lower storey. The same sort of arms emerge on the inner side of the wall columns to hold their share of the transverse beams.

The exterior bracketing (figs. 51, 59, 60) differs not only in the use of the lever arm, in principle a normal exterior feature in the monumental style of the Far East; its horizontal members, instead of the normal arms and bearing-blocks seen inside, are single corbels cut out in a decorative cloud shape. One such corbel, set on a block above each lever arm, gives bearing to the eaves purlin. The lever arm itself is braced by the extended end of the transverse interior beam; this beam is supported, in turn, by a long cloud-shaped corbel, the exterior end of the same timber which on the interior has the normal arm and bearing-

¹⁶⁹ See below, pp. 220-1.

block form. Above the column, in the wall plane, the usual bearing-blocks are supplanted by forms again cut out in cloud shape. The visible wall above this longitudinal bracketing rises to an unusual height; it is made up of three tiers of bracing-beams, with the wall purlin as a fourth at the top. The tiers are separated by single bearing-blocks (of normal shape) above each column; the second tier serves as the fulcrum of the lever arm. The latter runs inward to be held at its end by the construction above the interior column; and also receives, midway across the aisle, the downward thrust of the aisle purlin.

Details of form in this Asuka system are of great interest. The column has a decided entasis. Its capital, instead of being made up of two elements only, block and moulding, has at its bottom a third, a thin, plate-shaped member called in Japanese *sarato* 皿斗. This last, unknown in Han remains, is frequent in those of the Six Dynasties period on the continent, the architectural tomb paintings of Kokuli (fig. 56) and the miniature stone facades of Chinese cave temples like Yün-kang.¹⁷⁰ It disappears in Japan with the adoption of T'ang style. The feature seems to me associated with the column entasis also apparently unknown in Han and gradually discarded in T'ang. The Yün-kang caves contain strong Greco-Roman reminiscences in ornament and other architectural details, derived probably from Gandhāra. Since they illustrate an unmistakable version of the Ionic capital, as well as forms of Persian and Indian origin, it is hardly rash to assume that the Asuka column and capital represent a distant oriental descendant of the Roman Doric.¹⁷¹ Moulding and *sarato* are indeed square in plan, while the classical echinus and necking are round as a transition to the column cylinder; the change may have been due to preference, or simply to a misunderstanding of alien forms, which probably were transmitted in miniature or even in paintings, where their three-dimensional character was lost.

The orthodox bracketing arm of the "golden" hall interior, standing early in a tradition which can be traced in visible evidence for at least 2000 years, has a strength and beauty of form never again equalled (fig. 58). Its upper surface is slightly hollowed out; the underside is cut in a long curve, beginning almost imperceptibly as it emerges from the capital, and rising with a parabolic acceleration toward the end, so that the whole outline moves with a subtle vitality comparable only to that of the Greek Doric echinus of the fifth century. The end of the arm, not straight but projecting slightly at the bottom, forms a continuous curve with that of the bearing-block moulding above it. The same sort of strength and subtlety is combined in the cloud-shaped corbels of the style with a high degree of picturesque variety, as purely Chinese as the column entasis is western.

Bracketing at the corners of the eaves is a crucial point in later development in the Far East. In the Asuka style no special attention is given to the problem (fig. 60). The normally transverse sequence (in ascending order) of cloud corbel, beam-end, and lever arm merely emerges on the diagonal. The bearing-block on the end of the last is also set diagonally, and supports crossing cloud-corbels, which hold the intersecting ends of the

¹⁷⁰ Cf. Hamada, *op. cit.*, Bull. iii/1, figs. 2, 3.

¹⁷¹ Yün-kang architectural details of western origin are conveniently collected for reference in the drawings of "The Architecture of the North Wei Dynasty as Revealed in the Yün-kang Grottoes" (in Chinese), by Liang Ssü-ch'êng, Liu Tun-tsêng, and Phyllis Lin, Bull. iv/4, June, 1934.

eaves purlins. Above the corner column, the bracing-beams and purlins of the two walls intersect also, and run a few inches out beyond the intersection, to be cut off straight, a design of engaging directness.

Eaves purlin, *gangyo* 丸桁, and rafters, *taruki* 檼 may conveniently be noted at this point, as elements closely associated with the eaves bracketing. The former in the Asuka style is a timber oblong in cross-section; the latter, also oblong, form a single tier, unhidden by any sort of soffit boarding. In these points the existing Asuka buildings are unanimous. Minor dissent is voiced only by the Tamamushi shrine, standing on the altar of the "golden" hall.¹⁷² This is closely imitative of actual architecture in its forms (fig. 61), and in general corresponds to the evidence of the larger constructions with which it seems to be contemporary. Its purlins, however, are round, the cross-section typical of the succeeding Nara period, which may indicate a slightly different source of style. Its bracketing units, in addition, emerge not on transverse axes but at an angle away from each other, as if they followed radii from the same center which determines the corner diagonals. This method produces a more equal distribution of span along the eaves purlin than that adopted in actual Asuka architecture, and thus may have had practical use in a variant continental style.

BRACKETING OF THE "PROTO-NARA" PERIOD:

Evidence for this age is furnished by two pagodas only, one constructed at large scale in Yakushiji and the other an accurate miniature belonging to Kairyūōji and now in the Nara Museum.¹⁷³ The two are closely similar in style, and are clearly less advanced in development than monuments datable in Nara proper. Thus although the period of the Yakushiji pagoda is questioned, and no date of origin is known for the other, no doubts exist as to their representing a stage transitional from Asuka to the mature eighth century. The Kairyūōji model can be examined only in facade; the construction of the Yakushiji example is of course determined by its multi-storeyed character, but in its ground floor presents general parallels to the Hōryūji "golden" hall which permit both exterior and interior bracketing to be compared on something like the same terms.

The "proto-Nara" system thus exhibited marks a noticeable step toward the standardization of bracketing (figs. 52, 62). The lever arm remains peculiar to the construction above the wall columns; in other respects exterior and interior complexes now follow the same principle, abandoning the Asuka cloud corbel and using throughout the orthodox unit of arm and bearing-block. The cloud shapes used in earlier Japanese buildings have no exact parallels among existing remains elsewhere, but are related at least in their irregularity of contour to the shapes of bracket arms seen in Korea and China; the tradition probably goes back at least to the Han, for the descriptions of palaces of that age indicate a high

¹⁷² Cf. "The Architectural Significance of the 'Jade Cabinet' in Hōryūji" (translated into Chinese by Liu Tun-tseng from the Japanese of Tanabe 田邊), *Bull.* iii/1, March, 1932, pp. 61 ff. Also Amanuma, *Zūroku* i, pp. 56-65.

¹⁷³ Cf. Amanuma, "Details of the Architecture of Tempyō" (in Japanese), *Bukkyō-bijutsu* v, Dec. 1925, pp. 68-75 (for bracketing). See also above, p. 47 and notes 80 (Yakushiji), 144 (Kairyūōji).

degree of sculptural picturesqueness in architectural forms.¹⁷⁴ The classical style formulated in T'ang discarded all of this in favor of a severely architectonic design, as different from the earlier as is the formality of T'ang ornament from the almost formless decorative abandon of earlier centuries. The bracketing of the Nara period, purged of every element of the picturesque, is thus composed of elements which suggest only their actual structural function.

The weight transmitted from the eaves purlin (still oblong in section) to the lever arm now passes through the conventional three-headed longitudinal arm. The latter is braced, high up, by the same sort of projecting transverse beam as in Asuka; below it is supported by conventional bracket arms in two steps. The upper of these is a continuation outward of a second transverse beam, the lower a true bracket, emerging the same distance on the interior. The system above the interior columns is an amplification into two tiers of that seen at Hōryūji. The upper face of the arm is still hollowed out, and the curve of the underside is still vigorous, although limited now to the outer end of the arm. An odd, tongue-like appendage, flat against the face of the curve, is considered by Japanese architects a survival from the old cloud corbel. My own tentative explanation, based on the admitted acquaintance of the Far East with Greco-Roman architectural forms, is that it may represent the survival from some earlier Chinese imitation of the Roman cornice corbel with its acanthus lip. The *sarato* plate has disappeared, and the outer face of the arm is cut off vertically.

Corner bracketing, much more complicated than in the earlier style, has in "proto-Nara" assumed almost its definitive form (fig. 62). Projection is not merely on the diagonal, as at Hōryūji, but toward the front and side as well, the latter complexes being identical with those over other columns. The diagonal lever arm, again supported by two steps, holds near its end a bearing-block. The latter supports crossing three-headed arms, which give bearing to the purlin intersection, and an upper diagonal lever arm which holds the corner eaves beam. It should be noticed that the bearing-blocks used on the diagonal complex differ from the rest only in being set at 45 degrees; one of the signs of the mature style of Nara is the use of a special block design for this position.

Rafters are now in two tiers, the standard for later practise; the inner round, and the short outer tier square in section. Between the eaves purlin and the wall, the rafters are hidden by a soffit boarding *noki-tenjō*, panelled by stripping.

The inner end of the lever arm, as at Hōryūji, is held by the framing above the interior column. As at Hōryūji, again, it is hidden from sight by an aisle ceiling (fig. 52). We shall find the same thing true of the one example of lever arm construction in Nara, proper, the "golden" hall of Tōshōdaiji (fig. 53). Three examples hardly suffice to make a rule. It seems significant, however, that in the Sung style, in which the inner end of the lever arm had been carried to a high degree of functional efficiency—capable, at the same time, of ornamental effectiveness—its decorative possibilities were habitually utilized to the full, and the aisle ceiling was consequently omitted. It is possible that in earlier

¹⁷⁴ Continental parallels to the Asuka "cloud corbel" have been traced by Hamada, *op. cit.*, in *Bull.* iii/1. "Cloud brackets" are a not uncommon literary cliché in China, and were doubtless derived from some earlier Chinese practise comparable to that seen at Hōryūji.

centuries, while the inner arm was still without interest, it was normally kept out of sight.

In "proto-Nara," for the first time among existing remains, the intercolumnar strut appears at Yakushiji in the ground floor, in two superimposed tiers separating the bracing-beams of the wall. In the upper storeys and in the Kairyūōji miniature the feature is omitted for lack of space.

BRACKETING OF THE NARA PERIOD:

The standard of monumental T'ang bracketing, used thereafter in Japan for a thousand years in the so-called "Japanese style," *Wayō* 和様 appears in full perfection in the "golden" hall of Tōshōdaiji (fig. 53). The derivation of the formula from that of "proto-Nara" is clear. It marks a further advance in organization, and another step away from the picturesqueness and subtlety of the Asuka style.

The major differences in normal column-head bracketing are two. The purlin is now round, and between it and the three-headed arm held by the lever is an intermediate cushion timber, called *sane-hijiki* 實肘木, in the shape of a "boat" bracket, designed to lessen its unsupported span.

Again, the system now comprises two outer planes of support instead of the purlin plane alone. The upper of the two transverse arms, which holds the lever, holds also a longitudinal arm, giving bearing to an intermediate beam. Between this last and the wall purlin is a soffit, *noki-tenjō*, still reticulated but now much narrower than that of Yakushiji. Between it and the eaves purlin there now slopes a sort of cornice, divided by parallel strips, *noki-shirin*. I have spoken of the resemblance between this treatment and that of the tenth century Kuan-yin-ko in China, which retains many T'ang features (fig. 30). It is worthwhile to reiterate the contrast between the fine, long curve of the Tōshōdaiji "cornice" and the mere diagonal plane of the Chinese survival, since a comparable degeneration takes place in later Japanese versions. All early bracketing in Japan, based on the Chinese style at its strongest, has a sturdy boldness comparable to that of early Gothic vaulting and buttressing. The successive steps jut out resolutely to hold a wide overhang; all the intervals are well separated, making possible a generous "cornice" and soffit above. In subsequent Japanese development, the function of the bracketing as the support of the eaves is more and more taken over by an invisible framing system inside the roof. The bracketing itself contracts, as if affected by its comparative impotence, crowding the members close together. In the narrow intervals which remain, the "cornice" persists as a traditional feature, but must rise almost vertically between its two beams.

Corner bracketing is a crucial index of Nara style. In contrast to earlier practise, a new bearing-block form appears, the *onito* 鬼斗, specially designed for corner use. The upper, "abacus" portion of the block has its surfaces parallel to the rest, and so stands in a visual harmony with them. The moulded portion below is scalloped away to fit it to the diagonal arm on which it rests. The method, almost impossible to describe, is illustrated by figs. 63, 64. The *onito* is absent both from the earliest buildings remaining in north China, and from the later Ming-Ch'ing official style of the Peking region. It must either have been discarded at the end of T'ang, or have been a peculiarity of south Chinese

architecture, in the regions directly accessible to Japan by sea (for in the Nara period it surely cannot have been a Japanese invention).

The Nara corner system is distinguishable from the form which became standard in Japan with the Heian period, by its retention of one particular of the early simplicity. The corner complex is of course laid out on three axes, the diagonal and the two transverse, mounting from the corner capital. In the Nara style, these axes are strictly maintained; each transverse axis uses only transverse arms (with the proper longitudinal members intersecting them), and the diagonal axis is a succession of diagonal steps only, until at the top it expands into crossing arms which support the intersecting eaves purlins (fig. 63). In the Heian system, a greater visual coördination is effected by making the third step in the diagonal complex not merely a 45 degree lever arm, but also a pair of crossing arms (like those which support the purlins in the step above). Each of these new arms emerges to hold its share of the topmost longitudinal bracket, which now runs all the way across between the transverse and diagonal complexes (fig. 107). In this way, diagonal, transverse, and longitudinal members and the bearing-blocks between them are distributed as evenly as the complicated problem permits.

In the Nara style, lacking the final pair of crossing arms, there is no need for the topmost tier of longitudinal bracketing to run through continuously. Japanese practise in this respect is not unanimous, however. In the "golden" hall of Tōshōdaiji, the top longitudinal brackets have a conventional three-headed form still like those of "proto-Nara" (fig. 63). On the other hand, the east pagoda of Taimadera, which in other respects is less well organized and so seems earlier, has already the feature of very long, continuous top-tier brackets (fig. 64). The Taimadera west pagoda, in other respects comparable to Tōshōdaiji, uses the latter's formula in its first-floor eaves, and imitates its companion in the two upper storeys.

The Taimadera east pagoda shows clearly that the problem involves the whole proportioning of eaves projection. Its bracketing projects very boldly, with almost the same length of transverse arms as at Yakushiji. This means that the distance between its transverse and diagonal axes, at the top, is unusually wide; so that the longitudinal arm which runs between is unusually long, and must be crowned by no less than five fully visible bearing-blocks, in addition to the one at the corner. At Tōshōdaiji the bracketing projection is already noticeably less, and the existing, independent arms could be replaced by continuous members crowned by only four blocks, in addition to the corner (as is the practise in Heian). Any further decrease in projection begins to crowd the members together so that continuous longitudinal brackets become a practical necessity.

Various stages of solution appear among early Chinese remains. The bracketing drawn on the Ta-yen-t'a lintel is simpler in type, but shows an experiment with the same problem; the topmost longitudinal arms either meet under a single bearing-block, or are actually a single member carved to suggest two (fig. 50). As late as the tenth and eleventh centuries in the north, however, great halls like those of Tu-lo-ssū and Fêng-kuo-ssū still use bracketing which projects too far and is too widely spaced to permit continuous top members. The close spacing orthodox from Sung on resolves this difficulty, and thereafter corner bracketing is normally even more closely knit than in Heian (fig. 135).

The cross-section given of the "golden" hall of Tōshōdaiji (fig. 28) illustrates the interrelationship of beams and brackets on the interior, which must have been characteristic of monumental T'ang style. The inner end of the long lever arm is still anchored by the interior framing; my reconstruction of the roof, in addition, has proceeded from the likelihood that at the outset the lever also supported a now discarded aisle purlin, as at Hōryūji.

Other Nara buildings exhibit simpler bracketing systems appropriate to their less pretentious character. The Hokkedō of Tōdaiji has a fairly conventional one-step, two-tier system, with one transverse arm supporting one longitudinal, and that the purlin. Perhaps because there is no lever arm, perhaps simply because of the less monumental quality of the building, the aisle ceiling is omitted (fig. 21). At the simplest stage, no eaves purlin is used, the support being limited to the wall plane. Such is the case, for example, of the Hōryūji Dēpōdō, refectory, great east gate, and *sūtra* repository, the west Kondō of Kairyūōji, and the main hall of Shinyakushiji. The bracketing there may take the form of a three-headed arm set into the column cap, or may be merely a "boat" timber, *funa-hijiki* (as in the last mentioned hall). Normally the longitudinal member is intersected by the end of a transverse beam, projecting a few inches beyond the capital and cut off vertically.

The gradation in detail according to the importance of the building, which is visible in Japanese remains, seems actually to have been enforced in China by sumptuary legislation, at least in secular architecture. According to an Imperial decree promulgated in 827 under T'ang Wu Tsung, "residences of those beneath (the rank of) prince or duke may not be provided with superimposed bracketing and decorated ceilings" 重栱藻井.¹⁷⁵

Column entasis, almost exaggerated at Hōryūji, becomes subtler in the "proto-Nara" pagodas and even less noticeable in the later eighth century, and by the beginning of the next period seems to have disappeared almost entirely. The Nara standard at Tōshōdaiji, pipe-like and sharply rounded at the top to fit the smaller capital, marks a clear falling off in delicacy of design from the long, swelling curves of earlier practise.

All major columns, in any Japanese style founded even remotely upon Chinese, except in octagonal buildings are invariably round in plan. Such minor supports as those of porches are frequently square. This practise, attested for the continent also by later Chinese remains, appears in the Nara period in the penthouse galleries added around the "golden" hall and pagoda of Hōryūji, and the intermediate storeys of the Yakushiji pagoda. The posts in these cases are simply square, without the chamfering of later periods. Square posts also are used in the Tamamushi shrine, probably because of its small scale. Eight-sided pillars, which seem to have existed in China at least since the Han,¹⁷⁶ are used in the two octagonal halls of the Nara period, the Yumedono of Hōryūji and the Hak-kakuendō of Eizanji.

¹⁷⁵ *Hsin T'ang Shu*, xxiv, records of legislation concerning chariots and robes 車服志, xiv. More complete versions of the original edict are given in the *T'u Shu Chi Ch'êng*, 經濟彙編考工典, xxxv, 宮室總部彙考, 11 and 38.

¹⁷⁶ Cf. Pao Ting, Liu Tun-tsêng, and Liang Ssü-ch'êng, "The Architecture of the Han Dynasty" (in Chinese), *Bull.* v/2, Dec. '24, pp. 17 ff. The stone shrine dedicated to the filial son Kuo Chü 郭巨 on Hsiao-t'ang-shan 孝堂山 in Shantung, has 8-sided pillars on its front.

BEAMS IN THE WALL PLANE:

In addition to the several tiers of beams which run longitudinally through their bracketing, buildings of the Far East habitually possesses one or more below, binding together the wall columns. The simplest version, found in many of the Asuka and Nara buildings of Japan and in the earliest remaining in China, consists of a single beam tier, piercing the columns at their tops (fig. 51). The incised lintel drawing of the Ta-yen-t'a pagoda at Hsi-an-fu shows two such beam levels, a short distance apart, separated by dwarf struts, an amplification for greater stability and decorative reiteration (fig. 50). The timber so used is fairly high and thin; and, as a point of difference with later practise, does not project beyond the corners. Its function, besides that of tying the columns together, is to provide support for intercolumnar struts, which in their turn hold the bracing-beams running through the bracketing.

The virtual inevitability of the column-piercing beam in all existing Far Eastern architecture of early type implies its existence in earlier centuries as well. For this problem, Han evidence is unsatisfactory; the miniature buildings do not indicate columns at all, the bas-reliefs are obviously crude abbreviations, and the tomb-pillars of Ssü-ch'uan use architectural motives as elements of decoration detached from all normal use. The Chinese cave temple facades characteristically use instead of a beam piercing the column heads, one which runs across the tops of their capitals, in the fashion of the western architrave, above which the bracketing exists as a sort of frieze. In a hybrid style otherwise so full of direct borrowings from Western Asia, it seems to me not unlikely that this system of trabeation represents the influence of the Greco-Roman tradition imported from Gandhāra. A beam connecting the capital tops is used in the Tamamushi shrine, in addition to more conventional binding members below (fig. 61). Here the beam is set into the capital socket, however, in the fashion normal to Far Eastern joinery, while in the stone facades of Yün-kang and T'ien-lung-shan it is merely superimposed, like a classic architrave. I know of no other example of such a pseudo-architrave in the subsequent architectural histories of China, Korea, or Japan; the capital elsewhere always supports a bracket in the wall plane, not a beam; and thus the fashion, if an imported one, must have ruled during only the earliest, least critical centuries of Buddhism in China.

Certain buildings of Asuka and Nara possess in addition to the column-piercing beam, or even in its place, a quite different member, set flat rather than upright, so that it is as low and wide as the other is high and thin, and encases the columns on both sides instead of penetrating through them. In later Japanese practise, in the so-called "Japanese style," *Wayō*, derived from Nara, such timbers are almost always used, sometimes in as many as three tiers, at top, middle, and bottom of the columns, heavily proportioned and capable, obviously, of far more effective service in binding the supports together than a single thin beam at the top. The practise, to the best of my knowledge, is unknown in Chinese architecture at any date. Its fully evolved use in Japan must certainly represent a Japanese development, designed to cope with the violence peculiar to Nature there, the sudden lateral shocks of earthquakes and typhoons. Since this encasing beam is so inevitable in later construction and occurs only spordically in earlier, its presence in at least some of the early buildings is suspicious, as likely to be the result of later repairs as is the construc-

tion of the roof. Two unimpeachable works, however, prove its existence in the earliest Japanese construction, the Tamamushi shrine and the miniature pagoda of Kairyūōji (figs. 61, 62). Neither of these can have been altered in any essential since its first manufacture. Both show a comparatively narrow encasing beam at the very top of the column, directly beneath the capital and directly above the column-piercing beam. From the start, the encasing beam seems to have been used where a maximum of stability was necessary. Thus it is normal in early pagodas, and is used in the upper storeys of the Hōryūji "golden" hall and middle gate, while the piercing beam is used in the lower. In the Hōryūji cloister corridors and *sūtra* repository, and in the two octagonal halls of the Nara period, timbers of the same sort run as lintel and sill above and below the latticed windows (fig. 7, 27, 39). In the "golden" hall of Tōshōdaiji, where the enclosing beams run around the walls but are omitted across the front portico, and have the heavy proportion of later centuries, it seems more likely that they are present as a result of later repairs (fig. 28).

COLUMN BASES AND PLATFORMS:

In the Asuka period, the simplest form of column base, seen in the Hōryūji middle gate, is a natural stone flattened on the top.¹⁷⁷ Even in contemporary work there is an advance beyond this primitive stage. Thus the bases of the Hōryūji pagoda are rounded off; and from this rough circle there is on either side a rectangular projection, the *hazama-ishi* 狭間石, which joins the base to the stone sill. More finished examples of such appendages exist in the Korean temple Pulguksa, and suggest the immediate source of the Japanese usage.

The platforms of the Hōryūji Kondō and pagoda are built with a comparable Asuka simplicity (fig. 5). A fairly thin crowning course projects slightly over the edge. Below, forming the face of the terrace, rectangular stones are laid in two unequal courses, varying in height at different points. The floor of the platform and inside the building is of paving-stones set out in squares. The squat lower terrace around both of these buildings, different in design and material, is surely a later addition, though of uncertain date.¹⁷⁸

Early Nara column bases frequently elaborate the Hōryūji pagoda type, with or without the *hazama-ishi*, often taking a two or three-tiered form. The tiers are hardly more than flat disks, each a little smaller than the one below. The appearance of the form at a time of western influence on the Far East, and its complete disappearance later, raise the possibility of its being a distant cousin of the Greco-Roman moulded base, less skillfully executed in an ungrateful material. In works of the later eighth century, whether for economy or lack of interest—the Japanese have never excelled in stone-cutting—there is a tendency to revert to simpler forms, roughly shaped to fit the column. Normally the top of the base stone has a protruding dowel, designed to be set for greater security into a socket in the bottom of the column. The bases of the central shafts of pagodas reverse the form usual elsewhere, being hollowed out in a series of descending tiers, with a socket at the bottom to hold relics and treasure.

Nara platforms are markedly better organized than those of Hōryūji. Between

¹⁷⁷ Column bases and platforms are discussed by Kawakatsu, *Kokenchiku-nyūmon-kōwa*, pp. 37 ff.; Amanuma, *Shiyō*, pp. 47-9, 130; "Details of Tempyō," pp. 59-64 (with drawings).

crowning and sill courses, the dado is subdivided by flat posts; these and the dado itself are a single large stone-course in height. The evidence of the Tun-huang paintings goes to show that in China, at least, such panelled platforms might be painted in brightly contrasting colors;¹⁷⁸ an effect spared our timid tastes today by the mercy of time.

DOORS AND WINDOWS:

The doors of all early Japanese temple architecture, before the introduction of the Sung style in the thirteenth century, belong to a category called *itakarato* 板唐戸, i. e. doors of "Chinese style" (i. e. hinged) made up of planks only.¹⁷⁹ The most remarkable of the class are the earliest, the doors of the "golden" hall of Hōryūji, each of which is a single cypress plank, made so skilfully that it has suffered no warp or split in all the intervening centuries. The tour de force was apparently too difficult to be long continued. For greater convenience of timber size and a more certain avoidance of warping, the Nara period doors are made up of two or more planks—in the unusually large ones of the Tōshōdaiji "golden" hall, three or four, with strips across the back—and are stiffened by cross-pieces, or *hashibami* 端喰, set flush at top and bottom. As if for perfect convenience of comparison, a door of this type stands next to the single plank of the Hōryūji "golden" hall, in its penthouse gallery or *mokoshi* (fig. 69).

The early Hōryūji doors are perfectly plain. More common practise was to decorate the outer face by rows of bosses, or nail-heads in decorative form. In the Hōryūji penthouse, these are of gilded bronze in three members, a flat plate against the wood edge with lotus petals, a slightly protruding circular boss, and a nail-head knob at the center; in the Tōshōdaiji "golden" hall, they are of wood, lacquered and once gilded, and shaped like a dumpling. The celebrated description of the North Wei pagoda at Lo-yang mentions its possessing the same sort of gilded door bosses, and many Chinese pagodas of early date show the feature imitated in stone. No Japanese buildings, on the other hand, possess an ornamental door feature common in China at least from Han to the present, the knocker-handle (whether for practical use or merely decorative) in the shape of a monster or lion, with a ring in its mouth.¹⁸⁰

A feature common to early doors of the *itakarato* type is that their pivots extend vertically into continuous timbers, serving as lintel and sill above and below them. These, and the frames at either side, are simple members without mouldings. A close Chinese parallel to such doors and their frames exists in the miniature architectural *sūtra* cupboards running around the aisles of the Pao-chia-chiao-tsang-tien of Lower Hua-yen-ssū in Ta-t'ung-fu (fig. 150), dating in mid Liao around the middle of the eleventh century.¹⁸¹

Japanese temple windows, until the introduction of the Sung style, were latticed vertically, the bars being set at 45 degrees to the frame. In the Asuka period, as in the Hōryūji cloisters (fig. 39), they are separated by an interval greater than their own

¹⁷⁸ Cf. Pelliot, *Grottes*, pls. lii, liii, civ, exxiii, etc.

¹⁷⁹ Cf. Kawakatsu, pp. 121 ff.; Amanuma, *Shiyō*, pp. 131-2; "Details of Tempyō," pp. 65-7.

¹⁸⁰ Cf. Ch'ên Chung-ch'ih 陳仲篪, "Notes on Architectural Details" (in Chinese), *Bull. of Soc. for Research in Chinese Archit.*, v/3, March '35, pp. 139 ff.

¹⁸¹ Cf. *Bull.* iv/3, Ta-t'ung report fig. 34.

diagonal width. In Nara the interval is somewhat narrower, and in succeeding centuries it contracts still further, until in Kamakura the bars are side by side. Windows, like doors, are simply framed; frequently the space between their sills and the base of the wall is subdivided by wooden posts, the wall itself being, of course, of white plaster. The same sort of latticed window, imitated in stone, has been used in Chinese pagodas until a comparatively recent date. Its effect is imitated also in Nara for decorative purposes, as in the doors of the *mokoshi* penthouse of the Hōryūji pagoda, the upper part of which forms in each a large panel, subdivided as if by lattice bars but with no opening between. In the "golden" hall penthouse, the similar panels are actual windows.

ROOFS AND THEIR ORNAMENTS:

Roof forms in the Nara period are graded, like bracketing, according to the rank of the buildings they cover.¹⁸² The most monumental, like the two large halls of Tōshōdaiji and

¹⁸² Cf. Amanuma, *Shiyō*, pp. 52, 134; "Details of Tempyō," pp. 86-7. A surprising exception to the normal hierarchy of roofs forms has been claimed for the greatest of all Japanese halls, the Tōdaiji Daibutsuden. A brief note by Fukuyama in *Tōyō-bizyutu*, Nara III, pp. 235 ff., presents evidence to prove that the original form here was a hip-and-gable, rather than the monumental hip which the rebuilt hall has at present. The record which he uses is apparently available only as a manuscript belonging to the document collection of the Tōdaiji Southeast Precinct, Tōnanin, in a section dealing with temple repairs. The passage in question has lost its initial characters, so that its subject is not immediately obvious; unfortunate also is the fact that it is misdated, using the impossible "8th year of Chōkyū" 長久 (an era only 3 years long, 1040-43). Fukuyama corrects this by internal evidence to read "1st of Chōgen" 長元 (1028), which would mean that the repairs noted were made directly after a typhoon of 1027. The passage in one paragraph deals with the reerection of the Tengaimon gate, and so seems clearly to deal with Tōdaiji buildings. The crucial section opens:

"7 ken, 2-storeyed tile roofed Kondō, one building."

The next 5 characters are illegible, but from the general context probably began to record damage to the upper roof. Then follows:

"... northern 'flying' (i.e. outermost) eaves, 11 members; of the eastern and western 'hanging fish' 懸魚, 7 members; 4 'precious bells' and their wind-tinklers 風招; together with metal fittings from various places: all of these are completely lost. The roof tiles have fallen off or been broken. In the 'flying' eaves on all four sides (minor supporting members called) 木尻, 木負, and 瓦負 in various places have been broken, and both inner and outer plaster soffits between the rafters (?裏壁) have fallen out. In especial, damage has been suffered by the eaves beam at the northeast corner, and by the middle bay of the ridge, with its bearing-blocks, bracket arms, purlin, and rafters. The plaster walls are flaking off in the incessant rain. Four door panels have fallen out; and 44 metal door bosses, as well as (two characters missing) bars from the railing on east and west, are completely lost.

"Lower storey:

"In this storey, damage has been suffered by the timber ends (?木尻) of the rafters . . . (etc.)."

The important detail in all this is the mention of "hanging fish." These are ornamental wooden pendants used in a gable field (see p. 119, below), and could not exist in a hipped roof. Ergo the Kondō in question cannot have had a hip. Of the other possibilities, the (inherently improbable) gable is also excluded by the record's mention of "eaves on all four sides"; ergo the roof type used must have been a hip-and-gable.

Fukuyama's case seems strong enough at least to disturb the traditional axiom, but not so unimpeachable as to overthrow it. Throughout Chinese architectural history, an overwhelming weight of tradition has made the hip the one form suitable for buildings of the first class; it is hard to believe that

the Hokkedō, are hipped, *shichū* 四注, as was certainly the case in contemporary China. The least pretentious, single-storeyed gateways or buildings like the refectory and Dempōdō of Hōryūji, are gabled, *kirizuma* 切妻. The intermediate class, exemplified by the "golden" hall and middle gate of Hōryūji and the main hall of Shinyakushiji, have combination hip-and-gable roofs, *irimoya* 入母屋. In the Asuka period Tamamushi shrine, there is a sharp contrast between the two sections of this sort of combination roof, the gable being steep and the hip much flatter in slope, while the line between them is actually emphasized by a break in the tiling. Theoretically this should represent the earliest stage of a combination not yet fully reconciled. The same contrast in slope and break in tiling has been retained in the "golden" hall of Shitennōji, doubtless from its Asuka original, through all its many rebuildings. It is probable that this primitive version of the hip-and-gable, the

in the 8th century the Chinese principle would have been in abeyance, or that the Japanese in their supreme attempt to reach T'ang scale would have deliberately deprived themselves of the final element in monumentality. The contemporary map of Tōdaiji shows the Daibutsuden in simplified form, it is true, with only three bays across the front; but it shows also a double roof—with a balcony running around the lower, and the upper a manifest hip (*Tōei-shūkō*, iv, pl. 204). A reduction in the number of bays drawn is a reasonable adjustment to miniature scale; but it is hard to see why the draftsman who indicated a tiny balcony railing should have misdrawn the much more important roof line.

Another aberration from Chinese standards is frequently ascribed to the original Daibutsuden: a break in its lower eaves like that actually existing in two Heian period halls, the Byōdōin Hōōdō 平等院鳳凰堂 and the Hōkaiji Amidadō 法界寺阿彌陀堂, so that the middle section of the roof across the front is higher than elsewhere (figs. 78, 96, and see Amanuma, *Zūroku* i, p. 95). The practise is, to the best of my knowledge, unknown in China at any period. Its appearance in Heian Japan, as part of a general slackening of T'ang monumentality, is reasonable enough; at the mid 8th century it would have been an extraordinary innovation. There is no sign of this variation, either, in the Tōdaiji map of 756. The evidence, such as it is, is furnished by the 12th century picture scroll *Shigisan-engi* 信貴山緣起, which shows a view of the entrance to the Daibutsuden—the roof being invisible, but the columns of the middle 7 bays being taller than the rest (*Nihon-emakimono-shūsei* 日本繪巻物集成, Tōkyō, 1929, vii, p. 48). The axiom applied in this case is that the standards of realism in Yamato-e illustration were so strict that the picture must have been accurately drawn from the building itself, with a full understanding of all implications. Furthermore, there is no record of any major change in the Daibutsuden roof in centuries before the 12th—and lifting 7 bays of eaves would have been a major operation, at the scale of the building—so that the *Shigisan-engi*'s evidence must hold for the 8th century as well as for its own time. To all this, the first answer must be that the *Shigisan-engi* is in the same picture demonstrably below a true realistic accuracy. Its representation of the still existing bronze lantern in front of the steps is generalized and out of proportion; and the Great Buddha Himself is made to sit not on two tiers of lotus petals (as He does today, and must have since the beginning, for this bottom part of the statue is original) but three, and with a conventional floral pattern drawn on the petals instead of their proper *Mandaras* of Buddhas and lesser divinities. Rebuttal might proceed to claim that the artist of the *Shigisan-engi*—a Kyōto dweller by the quality of his style, and by the accurate knowledge he shows elsewhere of the Imperial palace—may never have been in Nara (in those days a long journey away, as the "Tale of Genji" shows). His view of the Daibutsuden may well have been composed of materials readily available: pilgrims' descriptions (for such a unique detail as the lantern), and Kyōto temples for the architecture. Several of these built in the 11th and 12th century followed the Tōdaiji tradition more or less closely in their general layouts, and in making the architectural focus a great two-storeyed hall with a tiled roof, 11 bays across the front, enshrining a colossal Rōshana image. The first and most famous was Hōjōji 法成寺, built by Fujiwara no Michinaga 道長 around 1025 (see below, pp. 131 ff. and notes 225-28), and setting the standard for all later Heian achievements by its magnificence and costliness. Now the Hōōdō of Byōdōin, in which the broken eaves line appears around 1053,

so-called *shikorobuki* 鋸葺, was also originally used at Hōryūji, being abandoned in the reconstruction of the roofs in the seventeenth century. At Shinyakushiji the break has disappeared, and the slope, although accelerated toward the top, is continuous.

All roofs of remaining Asuka and Nara buildings are of tile.¹⁸³ The latter is of two shapes: a flattish, segmental tile laid, back down, against the mud fill over the sheathing; and a semi-circular tile covering the other's intersections. At the edge of the eaves both kinds receive ornamental treatment, varying with their shape (fig. 65). The subject of the patterns used on such tile-heads is far too complicated for more than briefest mention here. It may be said merely that the round head is almost always ornamented with a lotus pattern, of widely varying form, which becomes increasingly complex and small in scale from Asuka to the end of Nara; while the segmental head has one type or another of rinceau, which like the lotus must have been ultimately western in origin.

The main ridges of buildings of major importance in Asuka and Nara were—probably in the majority of cases—embellished at each end by a large acroterion in the conventionalized shape of a bird's tail curving up and inward. Of the two still standing on the "golden" hall of Tōshōdaiji, the western is contemporary with the building; one of the originals from the Tamamushi shrine is preserved in the temple treasury, and has served as the basis for the modern copies now on the shrine itself (fig. 61). In addition, many such acroteria, made tile or even of stone, have been dug up on old temple sites, and show a variation of shape and surface ornament also worthy of special study. Several

was erected by Michinaga's son Yorimichi 頼道 (see below, pp. 140, and note 250). The brilliance of its decoration must have represented a deliberate attempt to equal or outdo the earlier generation; the still remaining door and wall paintings which illustrate the Coming of Amida were probably inspired by predecessors on the doors of the Amidaō of Hōjōji (described in the 11th century *Eiga-monogatari* 榮華物語, xviii, chapter "Tama no Utena," edition of Shunyōdō, Tōkyō, 1936, p. 441). I venture the suggestion that it was Hōjōji, at the full tide of Heian taste, which first broke away from Chinese convention toward a more picturesque roof line; and which was imitated at Byōdōin and Hōkaiji later (fig. 76). Incidentally the scale of Hōjōji, where the Roshana image was 32 feet high, is much more like that of the *Shigisan-engi* view than that of the immense Nara Daibutsuden; and the recorded decoration of the petals of its lotus throne, "with a hundred myriad great *mani* jewels" (*Eiga-mon.* xvii, "Ongaku," p. 430) fits the conventional patterns of the pictures much better. I prefer to believe, therefore, that the painter was actually recording his memory either of the Hōjōji Kondō (burned down 1058, but set up again in 1065 by Michinaga's sons, and still standing throughout the 12th century), or of some other great metropolitan hall which imitated it.

Thus the evidence for an unconventional lower roof on the 8th century Daibutsuden is even more difficult to accept than that which claims the upper was a hip-and-gable; and I believe that this extension of the problem makes it no easier to suppose that the great Nara hall was an exceptional design.

On the other hand, I must admit that I cannot find any obvious flaw in Fukuyama's material. The passage certainly describes some Nara Kondō: the two storeys and the great size implied ("7 ken" being a Heian way of saying that the chancel was 7 bays long; see below, p. 162) could fit no other type of hall; and the reasonable presumption is that the subject is the Kondō of Tōdaiji, since all other clues relate to this temple. Since the scribe was careless enough to make a gross error in dating, it is conceivable that he wrote "hanging fish" also by some mistaken association of ideas, or even by the transference of a whole line of characters from some other section. The whole document should be studied more carefully before any final decision is reached.

¹⁸³ Cf. Amanuma, "Details of Tempyō," pp. 87 ff.

Chinese texts concur in placing the origin of the feature in Han, when it is supposed to have been adopted as the symbol of a miraculous sea-monster, capable of extinguishing fire.¹⁸⁴ The roof-tile, in Japanese *shibi* 鴟尾, has the name of this monster, "whose tail resembles an owl's." In the Tamamushi version and in that found on the site of Hōrinji and probably also Asuka in date, the surface is actually decorated with conventionalized scales or feathers. In the Tōshodaiji *shibi* and in those shown on the T'ang pagoda lintel drawing of Hsi-an-fu (fig. 50), such vestigial realism of texture remains only as a sort of crest around the outside and top, the difference in date, therefore, being marked by an increase in formality.

Less important buildings possessed another type of acroterion for the main ridge, a large, flat, horseshoe-shaped tile called generically *onikawara* 鬼瓦 because its outside was usually moulded into the face of a demon.¹⁸⁵ Originals of the type remain still on the main hall of Shinyakushiji (fig. 65) and the Tengaimon gate of Tōdaiji, the face so flat as to be almost two-dimensional, framed at sides and top by a band of pearling. The *onikawara* proper conceals the end of the successive layers of flat tiles which make up the body of the ridge; above it, flaring slightly upward, a round tile with an ornamented head, the *tori-busuma* 鳥衾, runs out as the termination of the semicircular course capping the ridge. Alternative designs for the face of the horseshoe may be the mask of a lion, or a formal lotus pattern. I have seen one fragment of the *onikawara* type which presents remarkable analogies with Hellenistic acroteria, comprising a central palmette and what is apparently the nude arm of a small human figure grasping the floral scroll.¹⁸⁶ Close parallels to the demon face proper have been excavated from temple sites of the same period in Korea; and although I know of nothing of the kind remaining in China, the Han house models have sketchily shown ridge finials which could easily have developed into such a form.

A further use of tile ornaments on the typical early temple roof in Japan is made at the ends of the descending hip ridges. In the Tamamushi shrine and the Kairyūōji pagoda only one such ridge exists at each corner, and the ornament is simply the flaring *tori-busuma* (figs. 61, 62). The mature Nara style provides a double termination, the main ridge ending some distance from the corner and a short supplementary ridge, the *chigomune* 孫棟 continuing below. This treatment is typical for all later Japanese tiled roofs. On the main hall of Shinyakushiji, all these eight finials take the form of demon faces, like those on the main ridge; elsewhere the Nara originals have been lost.

The Saidaiji inventory, quoted in a previous chapter, proves at least one use in Japan of an additional ornament, this set at the center of the main ridge and highly elaborate in form. Whether the precedent was followed in later buildings or not, no trace of anything of the kind remains. In contrast, the central ridge ornament has been popular in China from the earliest evidences of its architecture to modern times (fig. 30); excellent proto-

¹⁸⁴ Cf. *Ying Tsao Fa Shih* ii under 鴟尾 for quotations dealing with the "owl's-tail" acroterion. Japanese versions in Amanuma's "Details of Temyō," fig. 17; *Zūroku*, pp. 64, 186-7.

¹⁸⁵ Amanuma, "Details of Temyō," figs. 15, 16; *Zūroku*, pp. 110-11, 126-27.

¹⁸⁶ Tōkyō Imperial Household Mus., April '36, special exhibition of Nara period objects recently excavated; from Sairinji 西琳寺 site (Osaka-fu, Minami-kawachi-gun, Furuichi-machi 古市町; catalogue no. 194).

types for the fashion imitated at Saidaiji exist, for example, in the miniature facades of Yün-kang and Lung-mên.¹⁸⁷ The "bronze, tile-shaped corner protectors" mentioned by the inventory, are probably a reference to *tori-busuma* like those of Kairyūōji (as well as an explanation of the symbolic purpose behind their use).

INTERIOR BEAMS AND INTER-BEAM SUPPORTS; THE GABLE FIELD:

Interior beams of Asuka and Nara possess a marked curve which justifies their Japanese name of *kōryō* 虹梁, or "rainbow beams."¹⁸⁸ The same phrase is used in Chinese descriptions of both T'ang and Six Dynasties Buddhist architecture, proving the community of form naturally to be expected; and the curving beam probably goes back in China at least to Han, since a parallel with the arch of the rainbow occurs more than once in the *fu* describing the palaces of the time.¹⁸⁹ In Asuka the whole span forms one long curve, beautifully evident in the Hōryūji cloisters (fig. 39). In Nara the curve descends abruptly at the "shoulders" of the beam, as it runs into its support; and the bottom contour is clearly cut from an original horizontal. In both styles the end of the beam, projecting outside the wall, runs horizontally and is cut off vertically; while its cross-section is slightly wider at top than at bottom. The effect is one of combined strength and lightness, in keeping with the general character of early architecture.

Support given by the beam to anything above it is transmitted through a block of ornamental shape, called by the Chinese a "camel's hump" 駝峯, and by the Japanese (with reference to its later development rather than the early form) *kaerumata* or "frog's-legs." The member has been mentioned earlier, in connection with the use of a closely related support as a unit of intercolumnar bracketing. Both are called *kaerumata* in Japan, and the two have been related in contour throughout their known evolution. The intercolumnar support, however, performs a hardly more than nominal service in actual construction, and so seems to have been conceived as a decorative element almost from the start.¹⁸⁷ Its earliest appearance, in stone facades and cave paintings of the Six Dynasties period, is in the shape of an inverted "V," a form of considerable strength. Even at T'ien-lung-shan, however, at the end of the archaic period, the sprawling arms have lost all sense of bracing. In T'ang, as the Hsi-an-fu pagoda lintel and the Tun-huang paintings show, the once architectonic "V" has become a curvilinear motif of almost pure decoration. It is from this version, two "legs" of ornamental contour rising to join under a bearing-block, that the intercolumnar *kaerumata* which first appears in Japan in the Heian period must have been derived. The support above the beam, on the other hand, must perform a real and important structural function; and thus although its outline may follow the same sort of curves as the other's, its center must remain solid. The two forms are distinguished in architectural terminology by prefixes: the inter-beam *kaerumata* by *ita* 板, "plank"; the bracketing variant by *kurinuki* 剝抜, "hollowed out."

In the Hōryūji cloisters, the transverse beams support the ridge-pole by a clearly

¹⁸⁷ Cf. Tokiwa and Sekino, *Buddhist Monuments*, ii, pls. 22, 28, 38, etc. (Yün-kang); 76, 90, etc. (Lung-mên).

¹⁸⁸ Cf. Kawakatsu, pp. 62 ff., 70 ff.; Amanuma, "Details of Tempyō," pp. 72-5.

structural, large-scale form of the inverted "V," each slanting arm being itself of beam proportions (fig. 39). A similar construction is used in one of the contemporary Korean tombs (fig. 57). This must be the functional prototype from which the intercolumnar unit lapsed into ornamental uselessness. As such it possesses a considerable historic interest. As a triangular support for the ridge-pole, it represents the (so far as I know) sole approach made by Far Eastern architecture to the principle of the truss. In a region of earthquakes and typhoons, a thorough application of truss forms would have been an enormous gain to the stability of wooden architecture. The experiment was a timid one, and apparently of relatively brief duration, in both Japan and China; a sign, perhaps, of the obstinately unscientific character of oriental thinking. The embryonic inverted "V" truss appears again in Nara to hold up the Shinyakushiji roof (fig. 22). It may turn up sporadically in later buildings by way of archaism or stressed simplicity as late as Kamakura (e.g. fig. 77), but by aesthetic choice rather than an interest in structural efficiency. In China it seems to have disappeared even more completely. Liang Ssü-ch'êng has recently published an instance of its use in "China's oldest wooden structure," the main hall of Fo-kuang-ssü 佛光寺 on Wu-t'ai-shan, dated 857,¹⁸⁹ where the details have still a good deal of the sturdiness of Hōryūji. What I should suppose to be a compromise between the unfamiliar triangle and the normal Far Eastern reticulation of horizontals and verticals—the use of single slanting supports to brace the purlins, doubled at the ridge-pole on either side of the normal king-post—was probably used more widely, and had a somewhat longer life on the continent. This practise is part of the structural repertory of the Hokkedō (fig. 21), and is a possible variant of the pure inverted "V" in later Japanese work, as a visible aesthetically determined form. On the mainland it is still frequent in Liao and Chin buildings, whether visible or hidden, as one of the elements of stable roof framing (figs. 29, 30). Its subsequent disappearance and the return to a vocabulary of right angles only, are part of the degeneration of later Chinese architecture, a loss of all flexibility and subtlety.

Remaining *ita-kaerumata* in the strict sense of the term belong to the buildings of the Nara period. In simple construction comparable to that of the Hōryūji cloisters—the same monastery's Tōdaimon, or the Tōdaiji Tengaimon (fig. 36)—they may aid again in supporting the ridge-pole, though smaller in scale than the embryonic truss; in the same way, each is supplemented above by a three-headed bracket, running longitudinally through the bearing-block at its top and thus giving a wide bearing for the ridge-pole.

In the more complicated framing of a large open roof, the member serves to separate and transmit weight between the tiers of beams. In the typical case of the Kairyūōji west "golden" hall, for example, the lower "rainbow beam" holds solid *ita-kaerumata* at its quarter points; these support a second tier beam; and the latter has at its center a third *kaerumata*, which through a longitudinal bracketing arm bears up the ridge-pole (fig. 40). Where the interior of the roof is closed over the chancel by a ceiling, as in the Hokkedō and the Kondō of Tōshōdaiji, the *kaerumata* support the interior ceiling framework (figs. 21, 28, 66).

As is appropriate to such structural use, the *itakaerumata* is comparatively low, and

¹⁸⁹ *Asia Magazine*, July, 1941, pp. 384 ff., fig. 3. The name of a Lady Ning, inscribed as donor on one of the hall beams, also appears on a stele outside dated 857.

is actually thicker than it is high. Its contour varies greatly. The simplest example, in the Hōryūji Tōdaimon, has still something of the angularity of the inverted "V." An analogous form made curvilinear sweeps up from both ends in a long cyma, in the Tōshōdaiji Kōdō and the Hōryūji *sūtra* repository (fig. 7). In the version of the Kairyūōji hall, this curve is interrupted by the suggestion of a cusp (fig. 40); which in the Hōryūji Dempōdō and Tōshōdaiji Kondō is increasingly exaggerated until it becomes a reverse curl (fig. 28). It is this last form which serves as the basis for the later evolution of the *kaerumata* in the Heian period. The same general sort of shape, with a floral character vaguely reminiscent of a palmette set upside down, is imitated in stone in the T'ang carvings of T'ien-lung-shan. The earliest preserved wood "camel's-humps" of China, although appreciably later, are still close to the T'ang prototypes seen in Japan. In the Confucian shrine of Chêng-ting-hsien, a building so early in style as to seem almost late T'ang, the form used in the open beamed ceiling is very like that of the Hōryūji east gate (figs. 42, 43). In the *sūtra* repository of Lung-hsing-ssū in the same city, which is probably Northern Sung,¹⁹⁰ the support again closely resembles the type of the Tengaimon of Tōdaiji (fig. 148).

The construction beneath the roof in Chinese architecture, and in the early buildings of Japan, is of visual importance on the exterior when the roof type is either a gable or a hip-and-gable. In this case, as in the framing of the exterior wall, the members in the enclosing plane are visible in the same form inside and out. In the former type the end wall is like a cross-section cut through the building, revealing perfectly its interior framework. Thus the gable facade of the Kairyūōji hall, or of the refectory, *sūtra* repository, or Dempōdō of Hōryūji, shows against the white plaster wall the system of beams and *kaerumata*, mounting to support purlins and ridge-pole, which is used between every pair of columns inside (figs. 7, 40). The only difference is that in the wall plane an axial column is added for greater stability under the lowest beam, this line of support being naturally omitted within for spatial reasons.

We shall find that in later Japanese architecture the gable facade becomes merely an ornament, without any relationship to the actual, hidden framing. In the Nara period such "dishonesty" of design is suggested in only one highly curious building type. This is the single-storeyed gateway exemplified by the Tengaimon of Tōdaiji and the great east gate, Tōdaimon, of Hōryūji.¹⁹² The building is two bays deep; each half, front and back, is spanned by its own "open roof," the two being covered by the single large gable roof visible outside (fig. 36). The gable end suggests a single open room inside, however, at first sight differing not at all from a facade like that of Kairyūōji; actually the only visible difference is that the lower beam level is made up of two timbers meeting on the axial column, rather than a single beam axially supported. The framing seen on the exterior is actually used inside also, where it suits very ill the purposes of the cross-section, the single upper-tier "rainbow beam" cutting through the intermediate wall and the interior rafters of both "open roofs." It would be more accurate to call this awkwardness

¹⁹⁰ Cf. Liang, "The Ancient Architecture of Chêng-ting Hsien," *Bull.* iv/2, Sept. 1933, pp. 39, 20 ff., figs. 82, 18, 19. These two buildings must be dated principally by style.

¹⁹¹ Amanuma, *Zūroku*, pp. 130, 148, 152-3, 158-9.

¹⁹² *Do.*, pp. 96-105, 144-6.

rather than dishonesty, saving the more discourteous term for those later cases in which it is truly applicable.

In the hip-and-gable roof, the gable section left exposed is only a small triangular field. In the one Nara instance of this form, the main hall of Shinyakushiji (fig. 65), the roof has been rebuilt in the later double-shell style, with an appreciable distance between rafters and tiling. In the process the outside of the roof has naturally been raised. On the ends, the difference seems to have been enough to conceal a portion of the framing which originally was exposed in the gable field. The Shinyakushiji roof is held above the chancel by a very large version of the inverted "V," the slanting arms, halfway down, holding bearing-blocks which support intermediate purlins (fig. 22). To judge from scale drawings of the hall, these blocks and purlins must have been visible on the exterior at the beginning, as interesting features of the gable facade; now they have disappeared under the tiles. In the hip-and-gable roof of the Tamamushi shrine, the hip is so low in slope that the gable field, with slanting braces and a kingpost, is exposed to the bottom of the roof-beam which holds them (fig. 61).¹²³ The middle gate and "golden" hall of Hōryūji are not available for comparison here, since all the details of their gable fields are of the seventeenth century.

The purlins running out beyond the gable facade, as in the *sūtra* repository of Hōryūji, are supported by longitudinal brackets from the ends of the "rainbow beams" (fig. 7). Additional gable features, purely exterior, are the barge-boards, *hafu-ita* 破風板, large, overhanging timbers which frame the sloping edges of the roof and follow its curves; and three ornamental "drops," one at the apex of the barge-boards, the so-called *gegyo* 懸魚 or "hanging fish," and two halfway down hiding the purlin ends, called *keta-kakushi* 桁隠. Because of the exposed position of such members, none is extant from a period earlier than the Kamakura. Those used to decorate earlier buildings today are usually of Momoyama or Edo date. The "hanging fish" of the late style, in particular, seems to have changed very greatly from its ancestors. The name suggests an original at least vaguely similar to a fish in shape, which the final voluted form certainly is not. Probably the best evidence for the lost Nara version is given by the Rengemon 蓮華門 gate of Tōji 東寺 in Kyōto (fig. 67). This was rebuilt in the Kamakura period, but the form of its *kaerumata* is so close to the late Nara type of the "golden" hall of Tōshōdaiji, and so unusual for Kamakura, as to suggest that it represents a fairly close imitation of the original of the early ninth century.¹²⁴ Under these circumstances, it is possible that the *gegyo*, which at least is split at the bottom like a fish's tail, may also have followed the shape of its predecessor to a considerable extent.

Unfortunately none remains on the Tamamushi shrine, whether by loss or because the member was absent from the start.

It is interesting to note that in T'ang China ornamental features of this type were reserved in lay architecture—like elaborate bracketing—for the highly privileged. The sumptuary ordinance already quoted, of 827, also proscribes the use by ordinary govern-

¹²³ *Do.*, p. 57.

¹²⁴ *Do.*, Kamakura i, pp. 76-81; *Shiyō*, pp. 264-65. For Tōji, see below, pp. 130-1, and note 222.

ment offices of "hanging fish, confronted phoenixes, or tile animals . . ." ¹⁹⁵—all typical roof ornaments today.

Ceilings and Canopies:

Ceilings occur in all major architecture of Asuka and Nara above the chancel area.¹⁹⁶ In those buildings which contain lever-arm bracketing—all the pagodas, and the "golden" halls of Hōryūji and Tōshōdaiji—they exist over the aisles as well; perhaps to conceal the inward extension of the lever, or perhaps merely because the stage of elaboration implied by such bracketing implies also a full ceiling equipment. In the middle class represented by the Hokkedō, where the brackets are fairly simple, the aisles are left open. In the even less pretentious halls of Shinyakushiji and Kairyūōji, and in the accessory buildings of Hōryūji, ceilings are entirely omitted.

The aisles ceiling is flat throughout, and has the simple support of transverse beams held by the column-top bracketing. The chancel ceiling takes the more monumental cove form. This is simplest at Hōryūji, where the slanting sides rise directly from the "frieze" above the chancel columns (fig. 20). In the Hokkedō and at Tōshōdaiji (figs. 21, 26, 28), the cove is held by increasingly complex bracketing—one-step, two-tier, and two-step, three-tier, respectively;—and because of its considerable width, is also crossed by large "rainbow beams" lacking at Hōryūji, which through *kaerumata* hold the frame around the flat ceiling above.

The flat ceiling is subdivided by a reticulation of comparatively thin, deep strips all at the same level, which form small coffers a few inches square. The sides of the cove are divided by parallel strips of the same kind, on the same axes, comparable to those which embellish the "cornice" of the eaves. The outline of the Hōryūji cove is almost a straight line, set at an angle of about 50 degrees with the horizontal. In the late Nara period at Tōshōdaiji it is a long curve, which with the swelling of the "rainbow" beam below beautifully softens the architectonic sternness of the interior (fig. 26).

The three main Trinity groups of the Hōryūji altar are emphasized by large wooden canopies suspended above them (fig. 17, 70).¹⁹⁷ The form of these closely resembles that of the canopies imitated in stone on the central shafts of Six Dynasties cave temples (fig. 18), and at the top of contemporary steles.¹⁹⁸ The ultimate inspiration seems clearly Indian, particularly for the scale pattern of the outside frame and the festoons below. The

¹⁹⁵ *Hsin T'ang Shu*, xxiv, states: "Government officers privileged to attend Imperial Audiences had been using hanging fish, affronted phoenixes, tile beasts, girders of wide span and aisle beams. It was proclaimed that since the lower classes were thereby roused to much discontent, the Mayor of the Capital, Tu Ts'ung, should so regulate and alter (conditions) that the practise should be discontinued, after a period of grace." 常參官施懸魚對鳳瓦獸通桁乳梁詔下人多怨者京兆尹杜悰條易行者爲寬限而事遂不行.

I have translated the last two offending details without too much confidence. In the *Ying Tsao Fa Shih* of 1100, 桁 and 梁 are generally equivalent in the sense of cross-beam; and 乳桁 means an aisle beam (with complete disregard of the literal sense). I presume that the proscription was directed against a too monumental interior planning, as well as against exterior ostentation.

¹⁹⁶ Cf. Kawakatsu, pp. 95-97; Amanuma, *Shiyō*, pp. 51-2, 133; "Details of Tempyō," p. 84.

¹⁹⁷ Of the three Kondō canopies, those over the icons of Shaka and Amida are originals, while the eastern, over Yakushi, is a Kamakura replacement in the same style.

inside, with a coved ceiling and parallel strips like those of the hall itself, is more Chinese (perhaps because the model imitated was only an exterior, in stone?) Simpler, shallow canopies, with a flat reticulated ceiling inside and a single-tier scale motif outside, hang in the Hōryūji Dempōdō.¹⁹⁸

From a literary source we know that one of the lost minor halls of Tōdaiji, the Amidadō, possessed a elaborately ornamented baldachino supported on pillars above its main icon.¹⁹⁹ The only possible trace of such treatment which remains, is a series of otherwise inexplicable holes in the altar railing of the Hokkedō, which might once have held the pillars of such a small shrine. It has been suggested that this railing and the two-tier octagonal platform below it, were originally in the Amidadō; and after the latter's loss in a typhoon, were removed to the Hokkedō to enhance the dignity of its furnishings.

ALTAR PLATFORMS AND RAILINGS:

The altar platform of Hōryūji is simply a plastered earth mound, of interest only in the degree of simplicity it indicates.²⁰⁰ A related form is used in Shinyakushiji, more interesting because of its odd, dumpling-shaped section and its plan, a circle interrupted by a long oblong in front.

The Tōshōdaiji dais, faced with stone, has the same sort of subdivision into crown, sill, and panelled dado as the typical Nara exterior terrace (fig. 71). For greater richness it possesses, inside the large dado oblong formed by the struts, a sunken panel in a shape something like a bowl, called in Japanese *kozama* 格狭間. It is probable that this decorative shape was originally taken from the ornamental outline of the legs of a stand. Such a prototype appears on the bases of many archaic Buddhist statues, and in its leg form is clearly visible in two platform tiers of the Tamamushi shrine. Precisely the same shape of leg, once wooden, is imitated as a form of panelling in stone in the upper of two bases

¹⁹⁸ Amanuma, *Zūroku*, p. 161.

¹⁹⁹ The Amidadō baldachino is recorded as follows in the *Amidain-keka-ryōshizaichō* 阿彌陀院悔過料資財帳, a Tōdaiji inventory of 767 (*Dainihon-komonjō* 古文書, v, pp. 671 ff.).

"One 'palace' (shrine) 宮殿; lacquered, octagonal, height 16.3 *shaku*.

"Canopy: at top one finial 珠, in the form of a golden flower; on the 8 corners, 8 golden phoenix shapes, each holding in its mouth a banner (fashioned of) various sorts of precious stones; and bearing inside it a great lotus blossom; furthermore, the shapes of flying Bodhisattvas, birds, clouds, and flowers, painted in gold, silver, and ink.

"Pillars, 8: these also painted with gold, silver, and ink, in the shapes of birds, flowers, etc.

"Platform in two tiers: the upper (fashioned as a) shore of a pond, with a beach of glass, bearing gold bronze openwork (?) 着金銅鏤臂金 and painted Bodhisattva shapes. The lower tier provided with lattice-work, upon which is a gold bronze openwork, with (?) 着金銅鏤臂端嬰等. On the railing are placed 8 gold flower-shaped finials."

Cf. Fukuyama, "Hokkedō," *Tōyō-bijutsu*, xxiii, p. 52. This Amidadō was apparently blown down in a typhoon of the mid Heian period; the *T-yōroku* records that its paraphernalia was stored thereafter in the Hokkedō storehouse. Fukuyama believes that the Hokkedō octagonal altar platform, which doesn't seem to have any particular relationship to the chancel it occupies, may have been the one originally used in the Amidadō.

²⁰⁰ Cf. Kawakatsu, pp. 128 ff.; Amanuma, "Details of Tempyō," pp. 77-84.

of an early T'ang tomb *stūpa* in Shantung.²⁰¹ The Tōshōdaiji *kozama* is designed in curves of great variety and strength, the sweep of the sides still suggesting the possibility of support; its general shape, characteristic of the early style, is wide and low. The stone surface inside the panel is slightly convex.

Kozama of similar shape, in a dado subdivided by struts, are used on the wood altar platform of the Hokkedō (fig. 68). This altar is unique in being both two-tiered and octagonal in plan. It merely surrounds the platform on which the main images of the hall stand, and has no integral connection with their placing; this apparent incongruity lends some basis for the theory, mentioned above, that it was originally used in another building as the support of a sort of baldachino.²⁰² The two tiers are alike, except in size and in the fact that the *kozama* of the lower encloses a horizontal latticing, the upper containing merely a board surface.

Both tiers of the Hokkedō altar possess railings. Railings of substantially the same sort, differing only in scale, were probably used in early Far Eastern architecture both on the exterior, around balconies, and on altar platforms inside. The standard of Asuka is set at Hōryūji by those of the "golden" hall, middle gate, and pagoda. The railing, *kōran* 勾欄, is composed of three horizontal members: a top hand-rail, *hokogi* 架木, round in section; an oblong middle rail, *hirageta*, 平桁, set flat; and an oblong sill, *jifuku* 地覆. All three project at the corners, but run horizontally and are cut off vertically, like the ends of early beams (fig. 59). In all the Hōryūji railings, the space between middle rail and sill is filled by wood bars forming a swastika design. The subdividing major posts are square in plan, with a small capital at the top. In the two halls, the balcony is supported by bracketing which closely recalls the friezes typical of Yün-kang and T'ien-lung-shan, a columnar three-headed arm alternating with an intercolumnar inverted "V." The proportioning of these brackets, especially, shows a clumsiness entirely unlike Asuka work, which must mean that they were remade in the seventeenth century rebuilding; however, the general form unquestionably reproduces the originals. Railings of the same sort, with a pierced swastika dado, may be seen imitated in stone in a large number of Chinese pagodas; the eleventh century wooden examples of the *sūtra* cases in Lower Hua-yen-ssū, in Ta-t'ung-fu, is only more elaborate and varied in its grille patterns.²⁰³

The "proto-Nara" style is shown in the miniature pagoda of Kairyūōji (fig. 62). Two minor differences exist. A variation merely of design has substituted horizontal bars for the swastika. A difference in period has replaced the former straight posts by a form called by the Japanese *bachigata* 撥形, because it swells out at the bottom like the plectrum, *bachi*, used in playing the lute. An almost exact parallel to this railing appears in a tenth century relief on the relic pagoda of Ch'i-hsia-ssū, 棲霞寺 Kiangsu.²⁰⁴ Substantially the same type is used on the two altar tiers of the Hokkedō, with a small-scale swastika grille

²⁰¹ Tokiwa and Sekino, *Buddhist Monuments*, i, 95; at Ling-yen-ssū 靈巖寺, Ch'ang-ch'ing-hsien 長清縣, Shantung, the tomb *stūpa* of the temple's founder, Fa-ting 法定.

²⁰² Ta-t'ung report, *Bull.* iv/3, figs. 34-56. Cf. also the rail inside the Kuan-yin-ko of Tu-lo-ssū, *Bull.* iii/2, figs. 55-6.

²⁰³ Tokiwa and Sekino, *op. cit.*, iv, pl. 7 ff.

recalling that of the Hua-yen-ssü *sūtra* cases; or, even more closely, that used on the interior balcony railings of the Kuan-yin-ko of Tu-lo-ssü in Chi-hsien (fig. 30), at the end of the tenth century.²⁰² The present hand-rails do not project at the corners, but sockets in the outside of the corner posts show that such projection originally existed.

DECORATION:

The exteriors of Asuka and Nara buildings present a simple and effective color scheme; the walls plastered white, and the timber-work a general deep red, with the cut faces of bracket arms, etc., painted in yellow and the window bars green. Literary sources speak of such colors in Chinese architecture from an early date.²⁰⁴ The most pretentious sometimes received in addition an enrichment by gilded bronze plates, set over the ends of rafters and tiles, and in the case of the octagonal hall, Hokuendō, of Kōfukuji, used also on the railing around the terrace.²⁰⁵ Gilded bronze bells were hung from the corners of the eaves, and the doors were diversified by rows of gilded bosses, as in the great North Wei pagoda at Lo-yang. As already mentioned, Chinese paintings often show stone terraces of T'ang type as painted in contrasting colors; there is, however, no evidence to show that this practise was imitated in Japan.

A more elaborate painted decoration was used in the chancel. In that of the "golden" hall of Hōryūji, original designs are still visible in the small coffers of the ceiling; and more clearly, in the same style, on the interiors of the canopies, the ceiling proper being painted in floral patterns while small landscape panels form a frieze below. The origin of the lotus and honeysuckle floral motives seems western. On the other hand, the Han palace descriptions speak of aquatic flowers being painted or carved on ceilings to guard against fire,²⁰⁶ so that the adoption of the Buddhist lotus in later centuries must have entailed merely a change of shape.

The most extensive remains of formal decoration in colors are those in the "golden" hall of Tōshōdaiji. Here even the exterior received an unusual degree of enrichment. There are traces of floral medallions on the doors, against a yellow ground, and of rinceaux on the columns between them; the eaves "cornice," between its parallel bars, seems to have been painted with figures of divinities and the flower called *hōsōge* 寶相華 or "precious image blossom," which falls miraculously from the sky upon a preaching Buddha.²⁰⁷ In the

²⁰⁴ By the Han period, "white walls" and "red pillars" become an almost inevitable cliché in any architectural description. E. g. the *Lu Ling-kuang-tien Fu*, the *Ching-fu-tien Fu*, the *Liang Tu Fu* 兩都賦 (*Wén Hsüan* i: "vermillion halls" 朱堂).

²⁰⁵ *Shōji-engishū* (p. 15), under Kōfukuji, Endōin 圓堂院: "tile heads, together with large and small rafter ends, and railing, provided with gold bronze fittings" 瓦端并大小垂木及高欄等用裁金銅筋. The same is recorded of the Hōryūji Yumedono in the *Tōin-engi-shizachō*.

²⁰⁶ Cf. references collected in the *Ying Tsao Fa Shih*, ii, under "ceiling coffers, 闢八藻井: e. g.:

Lu Ling-kuang-tien Fu: "From the circular recesses of the square coffered ceiling, blossoms hang with heads down, disclosing their luxuriance . . ." 圓淵方井反植花藻.

Sung Shu, by Shên Yo 沈約 (Liang dynasty): "The ceiling (literally "roof") was made with round medallions (literally "springs") set in square coffers (literally "wells"). Moreover, there were blossoms as an efficacious symbol against fire" 殿屋之爲圓泉方井兼花華者以厭火祥.

²⁰⁷ Cf. illustrations given in Amanuma, *Zūroku*, pp. 139-41.

chancel, one such blossom was set over four small coffers of the ceiling; while beams, *kaerumata*, brackets, ceiling strips and soffits, received a wide variety of decorative motives, Buddhas and Bodhisattvas, formal *hōsōge*, elaborate rinceaux, and even flower sprays in realistic groupings, much, indeed, of the repertory seen on decorated objects in the Shōsōin, and executed with a comparable skill. Most of this has disappeared today; some is visible on close examination, and small portions have been carefully restored to give some idea of the original. Chinese records of Buddhist architecture of the early centuries often speak in general terms of what must have been the same sort of decorative scheme.²⁰⁸ So far as is known today, the only remotely comparable interiors on the continent are those of two Liao halls, the Pao-chia-chiao-tsang-tien of Lower Hua-yen-ssū at Ta-t'ung and the main hall of Fêng-kuo-ssū at I-hsien in Manchukuo. These, in their use of *hōsōge* and the figures of flying angels, recall something of the spirit of Tōshōdaiji, but other motives are entirely different and the execution is relatively barbarous.²⁰⁹

²⁰⁸ E. g. the description of the hall of the Pure Land Paradise, Ching-t'u-t'ang 淨土堂, erected at the end of the 7th century in Shih-chi-ssū 實際寺 at Ch'ang-an: "Here were dragon purlins indeed, spanning the empty void, here rainbow girders crossing and returning again. Here were red pillars to outdazzle the sun, and green jade pendants lengthening to the breeze. Though it was not spring, yet were there flowers opening out in the coffers; though it was not night, yet the piled-up eaves were shrouded as if in mist. . . . The marvels of sculptured ridge and painted brackets exhausted Creation's patterns. . . ." 莫不虬棟凌虛虹梁架迴朱櫺絕日青瑣延風無春而反井舒花不暝而重簷稍霧 . . . 彫甍畫栱之異窮化之規模 (stele text given in Tokiwa and Sekino, *Buddhist Monuments*, text 1, pp. 86 ff.).

²⁰⁹ Cf. *Bull. for Research in Chinese Archit.*, iv/3, p. 30, figs. 21-2 (Ta-t'ung); *Bijutsu-kenkyū* xiv (Fêng-kuo-ssū); also Sekino, T., *Ryōkin-jidai* 遼金時代 *no Kenchiku to sono Butsuzō*, i, pls. 21-7, 45, 51, 52.

CHAPTER II: THE HEIAN PERIOD

ARCHITECTURAL REMAINS

- Byōdōin 平等院: Kyōto-fu, Kuze-gun, Uji-machi:
Hōōdō 鳳凰堂, "phoenix hall"
- Chūsonji 中尊寺: Iwate-ken, Nishiiwai-gun, Hiraizumi-mura 平泉村:
Konjikidō 金色堂, "gold-colored hall"
- Daigoji 醍醐寺: Kyōto, Fushimi-ku, Daigo-mura:
Pagoda, five-storeyed
Yakushidō 藥師堂, hall of Yakushi (in the upper temple, Kami-daigo)
- Fukiji 富貴寺: Oita-ken, Nishikunisaki-gun, Tashibu-mura 田梁村:
Ōdō 大堂, "great hall"
- Fukutokuan 福徳庵: Nagano-ken, Shimoina-gun, Ōshika-mura 大鹿村:
Main hall
- Hōkaiji 法界寺: Kyōto, Fushimi-ku, Hino-mura 日野村:
Amidadō 阿彌陀堂, hall of Amida
- Hōryūji:
Lecture hall
Bell pavilion
- Ishiyamadera 石山寺: Shiga-ken, Shiga-gun, Ishiyama-mura:
Main hall (rear half)
- Jōruriji 浄瑠璃寺: Kyōto-fu, Sōraku-gun, Tomio-mura 富尾村:
Main hall
- Kakurinji 鶴林寺: Hyōgo-ken, Kako-gun, Ikaruga-mura 鳩里村:
Jōgyōdō 定行堂, "hall of *Samādhi* attained by perpetual walking"
Taishidō 太子堂, hall of Prince (Shōtoku)
- Kōryūji 廣隆寺: Kyoto, Ukyō-ku, Uzumasa 太秦:
Lecture hall
- Kōzōji 高藏寺: Miyagi-ken, Igu-gun, Nishine-mura 西根村:
Amidadō
- Murōji 室生寺: Nara-ken, Uda-gun, Murō-mura:
"Golden" hall (rear half)
Pagoda, five-storeyed
- Ōjōgokurakuin 往生極樂院 or Sanzenin 三千院: Kyōto-fu, Otagi-gun,
Main hall Ōhara-mura 大原村
- Shiramizu 白水 Amidadō: Fukushima-ken, Iwaki-gun, Uchigō-mura 内郷村

GENERAL MONASTERY PLAN

The rise to dominance in ecclesiastical authority of the new sects of Tendai and Shingon, brought to Japan at the outset of the ninth century, was accompanied by a marked change in the character of newly-founded religious establishments. In the Nara period the great majority of monasteries and the most important had clustered around the capital in the plain, emphasizing the Chinese orthodoxy of the city's layout by a rigid axial symmetry, and matching its secular magnificence by their own. The introducers of the new sects, in establishing their headquarters instead on the secluded mountain-tops of Hieizan and Kōyasan, seem to have been motivated at least in part by a spirit of ascetic reform. Their first halls were hardly more than hermitages, set up in complete loneliness. The instructions left by Dengyō-daishi to his followers on his death in 822 prescribed for them a willing acceptance of rough garments, coarse food, and small dwellings, in the significant words, "Neither an estate of wide acres, nor a great fief providing foodstuffs is our portion; nor are our dwelling-places such a monastery of this world as the hierarchy of priests conceive."²¹⁰ It is difficult to absolve from all practical shrewdness the founders of sects which in later generations attained so extraordinary a degree of worldly success; at least it can be said that their asceticism, whether entirely sincere or in some part merely a tactical move directed against the ecclesiastical monopoly of the Nara orders, had a great effect on the placing of their architecture.

The deliberate avoidance of Nara formulae is most marked on Kōyasan. The site of the chief buildings of the original monastery, Kongōbuji 金剛峯寺 is a wide and comparatively level one, on which it would have been quite possible to lay out a general plan of conventionally symmetrical shape. Instead, the plan relationships are highly informal, though with an orientation toward the south; the largest elements, the main hall and the "great pagoda," Daitō, are close to each other but on different axes (fig. 72).²¹¹

On Hieizan the territory occupied by Enryakuji 延暦寺 is so irregular that any formal combination at large scale is impossible.²¹² In the main group, belonging to the East

²¹⁰ The most important work known to me on the major establishments of the esoteric sects during early Heian is Fukuyama's "Shoki Tendai Shingon Jiin no Kenchiku," *Bukkyō-kokogaku-kōza* 佛教考古學講座, Tōkyō 1936, iii, pp. 1 ff. Referred to hereafter as Fukuyama, *Tendai Shingon*. Here see p. 12, quoted from Saichō's biography, the *Eizan-daishiden* 叡山大師傳 (Zoku-gunshoruiju viii).

²¹¹ Taken from a picture scroll of the end of the 13th century, the *Ippen-shōnin-edon* 一遍上人繪傳 (*Nihon-emakimono-shūsei*, xxii). The view is inaccurate in reversing the positions of hall and pagoda. For the foundation of the Shingon headquarters on Mt. Kōya, Kongōbuji, cf. Fukuyama, *Tendai Shingon*, pp. 48 ff. The founder Kūkai, or Kōbō-daishi, petitioned to be granted this site in 816. The next year his pupils seem to have begun the erection of huts to serve as a retreat. It is not certain how much of the formal monastery layout was completed by his death on the mountain in 835; work of expansion seems to have continued throughout the 9th century. For Kongōbuji's most celebrated erection, the great pagoda called Daitō 大塔 and the new, esoteric form which it represented, see below, pp. 194 ff.

²¹² For the foundation of the Tendai headquarters on Mt. Hiei, cf. Fukuyama, *op. cit.*, pp. 4 ff., under Enryakuji 延暦寺. Tendai tradition claims that the mountain was used as a retreat by the founder, Saichō, as early as 785. Here again the establishment of a formal monastery is uncertain. A main hall, Chūdō 中堂, existed by the end of the century, but was only "a humble, small hermitage" 卑小の草庵.

Pagoda Precinct, the two chief buildings are at right angles to each other; the Komponchūdō 根本中堂 or main hall facing roughly east, and the lecture hall south. An axis does exist through the main hall, as a result of later alterations, leading in front of it up a very steep flight of steps to a kind of gate-house dedicated to Monju; but the difference of level is so great that the relationship is visually meaningless.

The same reaction which determined the secluded location of the Tendai and Shingon headquarters—or the encouragement given by their example—brought about the establishment of a large number of mountain temples during the Heian period, with a comparable irregularity of plan. Notable examples in the vicinity of Kyōto are: the Shingon Jingōji 神護寺 on Takaozan in the Western Hills; the Tendai Kuramadera 鞍馬寺 to the north; Kiyomizudera 清水寺, a branch of Kōfukuji in Nara, set on the slope of Higashiyama; and the upper temple of Daigoji, the Shingon Kami-daigo 上醍醐, to the southeast.²¹³ In these particular cases, the principle of southward orientation happens to be generally enforced, but even that restriction was by no means always in force. The Komponchūdō on Hieizan faces east. On the other side of Lake Biwa, where the mountains close off habitable land on the south, the two neighboring main halls of Kongōrinji 金剛輪寺 and

Saichō travelled in China from 804 to 805. After his return, aided by his increased prestige, the work was pushed more rapidly, although at a modest scale; and the principal precincts of Enryakuji were probably laid out during his lifetime. Several Enryakuji records, like the *Sammon-dōshaki* 山門堂舎記 or the *Eigaku-yōki* 叡岳要記 (both in *Gunshoruijū*, *Shakkabu*, pp. 468 ff.) quote an inventory which gives the names and dimensions of buildings existing in 859. Expansion continued until the end of the 10th century. For the central Komponchūdō, see below, pp. 163 ff.; for the Shakadō, pp. 170-1; for the Kōdō, pp. 284 ff.

²¹³ *Jingōji*: cf. Fukuyama, *op. cit.*, pp. 41 ff. First established as a private temple by Wake no Kiyomaro 和氣清麿, at the end of the 8th century, called (from its location) Takaozanji 高雄山寺. In 824 his son Sanetsuna 眞綱 re-organized it under Shingon auspices, on a new site in the same neighborhood and with the new name "Shingon Temple affording Divine Protection to the Good Fortune of the Realm" 神護國祚眞言寺. An inventory of the Shōhei period (931-7) is preserved in the *Jingōji-ryakki* 神護寺略記 (*D-n-bukkyō-zensho*, *Jishi-sōsho*, iii, pp. 108 ff.).

Kuramadera: according to its history, the *Kurama-kasa-no-tera-engi* 鞍馬蓋寺緣起 (same anthology, pp. 99 ff.), founded in 770 by a disciple of the Tang missionary Chien-chên, one Kanchō 鑑禪; who came thither led by a vision, saw a mysterious white horse bearing a jewelled saddle, followed this saddled horse 鞍馬 to the peak 蓋, and there was vouchsafed a vision of the Heavenly King of the North, Bishamon-tennō, in whose honor he set up a hermitage, 草庵. Subsequently this was enlarged, at the beginning of the 9th century, by Fujiwara no Isebito 伊勢人; and thereafter was held in honor because its situation to the north of Kyōto made it a key point of defense against the maleficent influences to be expected from that quarter.

Kiyomizudera: several records have been preserved (same anthology, i, pp. 216 ff.). Pious fable carries its origin back to the same sort of marvellous vision seen on the site as Kuramadera's, in this case as early as 586. The *Kiyomizudera-engi* (*ibid.*, pp. 219 ff.) states that a thatched-roof shrine 草堂 was set up in 780; that in 796 this was replaced by a Buddha hall, at which time the limits of the temple precincts were fixed by an order of the Council of State. In 807 this was further enlarged. For the main hall, see below, p. 285.

Kami-daigo: cf. Fukuyama, *op. cit.*, pp. 64 ff. Here the founder was an Imperial Prince turned monk, Shōbō-sōjō 聖寶僧正 (832-909). The prefatory thatched hermitage was set up around 870; in 907 the aid of the Emperor Daigo was secured, and an Imperially vowed monastery, Daigoji, was built (see below, p. 131). The main hall was dedicated in 926 at the foot of the hills. For the buildings at the summit, in Kami-daigo proper; Junteidō 准提堂, see below, p. 167; Yakushidō, pp. 149 ff.; *sūtra* repository, pp. 213 ff.

Saimyōji 西明寺—of Kamakura date, but reproducing predecessors on the same axes—face northward toward the lake as the terrain demands.²¹⁴

THE CITY TEMPLE.

There is clear evidence that the great Tendai and Shingon temples erected on level land around the capital throughout the Heian period, were inspired by no such ideals of asceticism and irregularity as were encouraged in the early mountain retreats of the founders. The capital around which they rose was a metropolis of Chinese type, another Nara on an even greater scale.²¹⁵ The society they served, although its culture moved farther with every generation from imported fashions toward the perfection of a purely Japanese ideal, maintained until its death a strong connection with Chinese tradition in everything pertaining to ceremonial, and hence to monumental architecture. The Imperial Palace in all its frequent rebuildings preserved until well into the Kamakura period a Hall of State, Daigokuden, with gateway and corridors in the purest T'ang style (fig. 74).²¹⁶ The formal basis of Heian society and government, however impotent and meaningless in fact, remained a Chinese one, highly organized and symmetrical, as long as its names were perpetuated. The public, ceremonial life of the Heian Court was founded on the same principles as that of the "Book of Rites." One central axis existed, the Emperor or the Regent standing in his place; before him the whole official hierarchy separated into symmetrical halves, Ministers, Vice-ministers, Generals, Secretaries, Censors of the Right and of the Left. Processions and seating arrangements carried out the division rigidly; even dancers and musicians, indispensable adjuncts of ceremony, were grouped on right and left, and performed in turn. This symmetrical organization, demanding a monumental palace architecture of Chinese type to accommodate it in secular concerns, was no less rigorous in what it required of religious building. The distinction between palace and temple has always been a narrow and easily over-ridden one in the Far East. In the Heian period, the great Buddhist establishments of the capital, erected by Emperors or great Ministers on a scale befitting the highest patronage, were on occasions of ceremony occupied by the Court precisely as if they were detached palaces; and the formal evolutions of procession and dance which took place within them had the same symmetrical basis whether religious or secular in purpose (figs. 73, 74). The records of dedication rites of the Imperial temples which we shall study below, as giving the clearest evidence of the architectural framework for this sort of official worship, make clear its dual character and use.²¹⁷ Each contains the standard phrase, "It was decreed that the procedure followed should be the same as that of the *Gosai-e* 御濟會." The latter was the most important of all religious festivals, held annually in the first month in the Hall of State of the Imperial Palace (fig. 74). Thus the palace might be used as a temple, or the temple as a palace; the cere-

²¹⁴ See below, pp. 141 ff., and notes 252, 439.

²¹⁵ Cf. Ponsonby Fane, *Kyōto*, pp. 14 ff.

²¹⁶ *Ibid.*, p. 37. Views of the Daigokuden are given in the 12th century picture scroll *Nenjū-gyōji* 年中行事 (*N-emakimono-shūsei*, xii-xiv. The original has been lost; the published version is a careful copy made by artists of the Sumiyoshi school in 1626).

²¹⁷ See below, pp. 134 ff., 137-9.

monies in either case were substantially the same, and so, therefore, was the architectural layout.

In comparison with Nara, Kyōto produced no such colossal monuments of piety and extravagance as Tōdaiji. Whether or not the peak of religious enthusiasm had passed, it was no longer possible in Heian to concentrate the resources of the nation on one purpose, as it had been in the eighth century. The ninth was a period of comparative inactivity. The Nara sects, already outmoded, were responsible for little building in the new capital, while the new esoteric orders were still bound by traditions of austere simplicity; after the strain of Tōdaiji and the transfer to Kyōto, the Imperial impulse toward magnificence lay exhausted. A revival of ambitious temple architecture seems to have begun in the tenth century, encouraged by the growing worldliness of Tendai and Shingon, and drawing chief support from the increasing self-assertiveness of the Fujiwara clan. The climax of this Silver Age, the erection of Hōjōji 法成寺 by the Regent Michinaga in the early eleventh, marked the zenith of Fujiwara prosperity. In the last quarter of the century, when supremacy had returned to the Imperial House, the ex-Emperors who inherited the Fujiwara administrative system did their best to outdo the traditions of lavishness set by the clan. The gradual diversion of national resources away from Kyōto made the old standards increasingly difficult to maintain, however. Even Hōjōji was well below the scale of Tōdaiji, and was provided by Michinaga with only a single pagoda (like the majority of Heian establishments). Hōshōji 法勝寺, dedicated by the Emperor Shirakawa in 1077, and Sonshōji 尊勝寺, dedicated by his son Horikawa in 1102, were still great monasteries by any standard, the former containing (by tradition) the "largest pagoda in the world"; but after this final effort, the decline was rapid.²¹⁸ In the Kamakura period, Kyōto society was too impoverished to provide anything more than restoration for the ancient sects which it had so long supported.

In one respect the Heian era showed an expansion of religious architecture in comparison to Nara, the number of subsidiary halls of worship thought necessary for the equipment of a major temple. We have seen what was perhaps the Nara maximum at Saidaiji, two major buildings dedicated to Yakushi and Miroku and two minor to the Eleven-headed Kannon and the Four Kings. The advent of esoteric Buddhism brought into popularity not only new deities or new and more specialized aspects of the old, but even new methods of worship for which separate buildings were necessary. Dengyō-daishi had introduced on Hieizan four techniques of attaining *Samādhi*; an Enryakuji inventory of 859 shows that a generation after his death the monastery possessed individual halls for two of these, one for the technique of "half walking, half sitting," a Hangyōhanza-sammaidō 半行半座三昧堂 and one for that of "perpetual walking," a Jōgyō-sammaidō 常行三昧堂.²¹⁹ Both of these were square, because the practises they accommodated were based on the *pradakṣiṇa* around a central icon. A building of the same sort common in later Heian establishments was the Hokke-sammaidō 法華三昧堂, dedicated to the practise of penitential rites based on the *Lotus Sūtra*, *Hokkekyō*.

²¹⁸ See below: Hōjōji, pp. 131 ff. and note 225; Hōshōji, pp. 137-8, note 243; Sonshōji, p. 139, note 248.

²¹⁹ Fukuyama, *Tendai Shingon*, p. 15; or cf. sources in *Gunsho-ruijū*. For the plan of this type of building, see below, pp. 151 ff.

Shingon, placing the greatest emphasis on a progressive initiation into the higher mysteries of its doctrines by the lustral rite of *Kanchō*, possessed in its main temples a special *Kanchōdō* 灌頂堂, as one of their chief features.²²⁰ Accompanying this was a special *Gomadō* 護摩堂 for the rite of burnt offerings, *Goma*.

Of halls dedicated to particular divinities, by far the most important and popular from middle Heian on was the *Amidadō*. Paralleling this, the essence of *Jōdō* doctrine, might be the essence of Tantrism: a *Godaidō* 五大堂, erected to house the Five Gods of Wrath. Special buildings were frequently devoted to other new divinities, the *Nyoirin* and *Juntei* aspects of *Kannon*, the *Mandaras*, and the like. Shingon temples frequently possessed memorial chapels to their founder, *Kōbō-daishi*, under the name *Miedō* 御景堂. Both sects made use of a new pagoda type, which will be discussed in a later section.²²¹

Most of these buildings were carried out under normal circumstances at a fairly small scale, and in the economical tradition of shingled roofs. Thus it was not impossible to combine an expansion of foci or worship with a general decrease in monastery size.

One of the two great monasteries erected in *Kyōto* at the outset of the Heian period. *Tōji*, still preserves the main lines of its original organization, although cloister corridors have disappeared.²²² The general form is a somewhat simpler and smaller version of that used in the culminating efforts of the previous century. Only one pagoda, the eastern, was ever built. There are no such subsidiary halls, symmetrical about the main axis, as the east and west *Kondōs* of *Kōfukuji*, or the balancing precincts far in front of the middle gate at *Saidaiji*. The refectory, again, conforms to a simpler and perhaps earlier scheme by standing on axis behind the lecture hall, instead of occupying a special position at the northeast.

The statement is often made that *Tōji* shows no esoteric influence in its major organization because it was erected at the outset for the use of one of the earlier sects, and was gradually completed all during the first quarter of the century, while its final assignment to *Kōbō-daishi* for Shingon use did not occur until 823. The supposition seems to me to be based on a misunderstanding of the general character of esoteric temples during the Heian

²²⁰ For these two halls in the Shingon headquarters at the capital, *Tōji*, see below, pp. 172 ff. and note 292.

²²¹ See below, pp. 194 ff.

²²² Cf. Fukuyama, *op. cit.*, pp. 27 ff. The erection of the new capital, *Kyōto*, involved as a matter of course the provision of two great monasteries (two, apparently for no other reason than the importance still given to the Chinese principle of symmetry). These balanced each other in the southern portion of the metropolis, on either side of the great central avenue, *Suzaku-ōji* 朱雀大路, and from their positions were always called "eastern" and "western," *Tōji* and *Saiji*. Their construction seems to have been begun, as an enterprise of the state, around 800; and their *Kondōs* were probably completed in the first decade. In 823, the influence of *Kōbō-daishi* at court won him a foothold in *Tōji*; by 835 his control of the monastery was complete, and it became the headquarters of Shingon in *Kyōto*. In that year he certified that the monastic buildings were completed. It would seem, however, that the pagoda, although begun with great ceremony in 826—when 3,430 men were used to pull the timbers down from the hills—was not actually completed until the 880's. Much less is known about *Saiji*, which lacked the backing of a vigorous new sect like Shingon, and thus, after a disastrous fire in 990, lay deserted until the end of Heian. Today its site has entirely disappeared.

The remaining *Tōji* buildings are all comparatively modern, the *Kondō* being a work of the early 17th century (see below, p. 284).

period; a failure to realize the marked difference in organization between those set up in picturesque disorder on the mountain peaks, and those in the plain around the capital. The latter carried on a symmetrical courtyard scheme comparable to that of Nara tradition, in every century, in the full tide of Tendai and Shingon supremacy. It is true that Tōji is quite unlike either Enryakuji on Hieizan or Kongōbuji on Kōyasan in its arrangement. On the other hand, it seems actually to have been surpassed in fidelity to Nara precedent by the temple of Sonshōji, completed under full esoteric auspices in 1103.

The Tōji pagoda, again, was built in the conventional five-storeyed form which had been standardized in the previous century, instead of in the special, newly imported Tahōtō 多寶塔 style more proper to esoteric Buddhism.²²³ The first stages of its construction, moreover, were actually supervised by Kōbō-daishi in his capacity of monastery steward, from 826 on, so that a change in the original design would not have been impossible had it been thought necessary. Actually, Tōji is merely the earliest of many esoteric temples furnished with pagodas in the conventional style; the general principle may be hazarded that the latter are generally present in ground plans of conventional formality, while the Tahōtō, with no place in the traditional scheme, is usually found where no such scheme exists.

A ready parallel to the five-storeyed Tōji pagoda is furnished by that of Daigoji, erected as part of the equipment of a monastery devoted to Shingon from the start, in the mid tenth century. The ground layout of Lower Daigo—on level terrain in contrast to the great irregularity of the upper temple's site—permitted it to be organized in a symmetrical and axial form. The only element of major design in this, beyond the usual formulae, which requires attention, is that which was used to balance the pagoda: a shrine to the tutelary god of the region whose assistance enabled the temple's founder, Shōbō-shōnin 聖寶上人, to select a site of the proper purity and seclusion.^{224, 225} This is a sign of the growing fusion of esoteric Buddhism and Shintō, not often illustrated in such obvious juxtaposition even in later centuries, but persisting as an influence on both until their final separation by decree in the Meiji period.

Daigoji, erected as a first-class monastery under the patronage of the Emperor Daigo in the first quarter of the tenth century, shows in its formally laid out lower temple hardly more than a tedious persistence of formulae. The next major establishment of which a record of any clarity remains is Hōjōji, the culmination of Fujiwara no Michinaga's magnificence a hundred years later. No concrete evidence of this temple remains; but lengthy descriptions of it included in the eleventh century *Eiga-monogatari* 榮華物語, and the dedication records of its successive stages of completion, contain enough data to permit a reconstruction at least of the broad outlines of its general plan.²²⁶ This reconstruction

²²³ See below, pp. 194 ff.

²²⁴ Cf. plan of Daigoji (the lower temple) given by Fukuyama, *op. cit.*, p. 71.

²²⁵ Cf. *Kōji-ruien*, *Shūkyōbu*, iii, pp. 397 ff., under *Hōjōji*, where these sources are quoted in extenso. Also Ōoka 大岡, "Tendai Shingon no Jūin-kenchiku," *Bukkyō-kokogaku-kōza*, xv, Dec. 1937, under *Hōjōji*. Four main dedication ceremonies marked the completion of various stages of this temple's layout: in 1020, the Amidadō or Muryōjūin 無量壽院 dedicated to Amida; in 1022, Kondō and Godaidō; in 1024, Yakushidō; in 1030, pagoda. (For the latter, cf. note 80, relating its destruction by fire, and replacement by the two from the original Yakushiji at Asuka).

shows clearly that Hōjōji, although still axial and symmetrical in layout and still based on a courtyard system, was not merely a reduced repetition of a Nara monastery, but something new to Japan (or at least unrepresented in earlier remains). Its changes from the old formula, as regards the central cloister nucleus, were three. The *sūtra* and bell pavilions, instead of being behind the "golden" hall, were now in front of it, apparently near the south corners of the courtyard. Second, the subsidiary symmetrical halls of worship, entirely outside the nucleus in the Nara period and perhaps far away from it at Saidaiji, were here made a part of it, being either entirely inside, or elements interrupting the cloister corridors running north-and-south. Third, the center of the courtyard was occupied by a large artificial pond (fig. 76).

It is not necessary to look for the remains or the records of temples in China to find the precedents for such a scheme, nor does it justify any theory of a purely Japanese origin. The most overwhelmingly popular aspect of Buddhism among the aristocracy of Michinaga's day was the worship of Amida. The representations of that Buddha in His Paradise current in the Far East at least since the eighth century show Him throned with His retinue in a great courtyard (fig. 75). On the axis behind is typically a large hall, while similar buildings rise on His left and right; in front is the Lotus Lake, from which souls are reborn. The arrangement at least of pond and major halls is the same as that which seems to have existed at Hōjōji, and with hardly a possibility of doubt was its source. Michinaga was an ardent worshipper of Amida; and at the end of a not entirely edifying life died in the conviction of a blessed resurrection in His Pure Land, holding at the last a golden thread which led to the painted form of the Buddha coming in welcome. The main, axial "golden" hall at Hōjōji, it is true, was devoted not to Amida but to His superior in esoteric theogony, the primal unity Birushana; but it was the Amidaō which was first erected, on which the chief attention of donor, architects, and artists was concentrated, and from which the whole temple derived its chief glory. A comparison of the precinct with the palaces of Paradise seems to have been a commonplace of contemporary eulogy. The word "Jōdō," the Pure Land, recurs again and again by way of simile in the *Eiga-monogatari*; the author's description of the courtyard nucleus reads like a paraphrase of the praise of the Western Paradise in the Amida *sūtras*.²²⁶

"He who gave his attention in tranquillity to the appearance of the precinct's interior, (would have seen) the sand of the courtyard sparkling like crystal, the water of the pond pure and clear, with all manner of lotus flowers growing in it. Above it the various Buddhas deigned to show Themselves, presenting Their august reflections in the pond; (in like manner) were reflected the august halls on east, west, south, and north, down to the *sūtra* repository and bell pavilion, so that it seemed to be some Buddha World (that was seen). Surrounding the pond, trees were planted, from all the branches of which were suspended silk nets; the flower petals trembled even without wind, so delicate were they. Leaves of green pearls, the hue of emerald, and drooping branches of crystal could be seen in the bottom of the pond; soft blossoms from time to time went fluttering down. There were leaves of green pearls, the green of pine trees in full summer-tide. There were leaves of

²²⁶ *Eiga-monogatari*, xvii, "Ongaku," p. 429.

pure gold, like the red of foliage in deep autumn. There were leaves of amber, like the yellow of foliage in mid autumn. There were leaves of white glass, like a garden mantled with snow in winter. Thus were they of all sorts and varied species. The wind, blowing through these trees, (stirred) ripples on the pond which lapped against its gold and jade banks. A bridge made of the Seven Precious Things spanned this gold and jade pool; vessels made of divers precious things went to and fro among the reflections of the trees; while peacocks and parrots played on the central island.

"He who looked at the august halls (would have seen as it were) palaces formed of the Seven Treasures.²²⁷ The roof tiles of pearl of the 'jewelled towers' lent the green of their covering; the glazed walls, the whiteness of their coat. The gleam of the tiles reflected the sky; there were column bases of ivory, ridges of red gold, gilded doors, platforms of crystal. Thus were they adorned and made majestic with every sort of varied treasure, gleaming in every sort of combination"

This is a description, obviously, set in terms of the divine rather than the human. The final resemblance to the great assembly court of the Pure Land was given on ceremonial occasions like the dedication of the buildings and images; at which time, according to the record of the occasion, "a dance platform was erected over the south side of the pond, reaching to the central island,"²²⁸ and dances were performed as offerings to the Buddhas by youths dressed as butterflies, *Kalavinka* birds, and Bodhisattvas. Scenes of this sort are repeated many times among the Amida paintings of Tun-huang.²²⁹ Doubtless the iconographic type served as the direct inspiration for the design of temples with strong Amidist connections like Hōjōji, in Japan.

In China, of course, it was probably an existing architectural type which formed the basis of the Pure Land picture. As I have said in discussing the T'ang monastery in the previous chapter, there is a general connection between such a grouping of three large halls together, and the ideal monastic layout given by Tao-hsüan in his treatise on the altar of ordination, in which every axial hall of worship is balanced by one to east and one to west of it.²³⁰ Tao-hsüan's system of organization still places the bell and *sūtra* pavilions between "golden" hall and lecture hall, where they had been in the Six Dynasties, whereas at Hōjōji they must have been fairly near the middle gate. These elements in China, generally with a drum tower taking the place of the *sūtra* repository, seem with the passage of time gradually to have advanced from their ancient position toward the rear of the monastery, to become—at least in the Ming-Ch'ing style of Peking—standard features of the first court inside the gateway. Michinaga's temple represents the earliest evidence of

²²⁷ Do. この御堂を御覧すれば七寶所成の宮殿なり寶樓の眞珠の瓦青く葺き瑠璃の壁白く塗り瓦光りて空の影見え大象の礎石紫金の棟金色の扉水精の基種種の雜寶をもて莊嚴し嚴飾せり色色交り耀せり。In composing this description, the author seems to have had in his mind not only the Amida *sūtras*, but also such typical Chinese effusions as those of the *San Fu Huang Tu* (cf. p. 11, above).

²²⁸ *Gunshoruijū, Shakkabū*, "Hōjōji-kondō-kuyōki 供養記," p. 263. 庭池之南構舞臺通中洲。

²²⁹ Cf. the Amida Paradise scenes collected by Matsumoto in his study of Tun-huang iconography, *Tonkōgu no Kenkyū*, pp. 1 ff. and plates.

²³⁰ See above, p. 37 and note 82.

the change known to me.²²¹ In Japan it was probably based on some other source of information about Chinese fashions than the Jōdō picture, since the latter is habitually cut off too short to show any building elements south of the Lotus Lake.

Fig. 76 gives a tentative reconstruction of the main courtyard nucleus of Hōjōji, based on the data furnished by the *Eiga-monogatari* and the various records of its dedication. The scale of at least the chief buildings must have been unusually monumental. It is recorded that the timbers used were too large to be transported by carts, and so were floated down the Kamo River, out of the hills, to Kyōto. The chief icon of the "golden" hall was a colossal Birushana-butsu, 32 *shaku* high and thus twice the normal standard. This hall is described in the records as being both roofed and paved with tile.²²² The presence or absence of these features in Japanese architecture is highly significant. Their absence, and a mention instead of shingled roofs and wood flooring, normally characterizes by those terms alone one whole subdivision of building, carried out in a more or less predominantly Japanese style. The presence of tile indicates a more or less thorough retention of Chinese methods, whether inherited through the fashions of the Nara period or those of Zen in Kamakura. The main hall, then, was probably built within a stylistic tradition stemming from Nara and T'ang; as was fitting in the focal point of a temple layout also Chinese in its principles.

At either side in front of the "golden" hall rose a subsidiary building, the hall of Amida or Amidadō on the west and that of the Five Great Gods of Wrath, or Godaidō, on the east. The actual position of these in the courtyard and their relationship to the enclosing corridors is not clear. It is certain that they faced toward each other, as the east and west "golden" halls of Nara had done, rather than to the south. This orientation was particularly appropriate in the case of Amida, who is the Buddha of the west, and whose worshippers naturally turn westward in addressing Him. There was no similar connection between the Five Great Gods and the east, since each one of them represented himself a direction. Symmetry, rather than Buddhist theory, thus determined the position of their hall.

The position of the *sūtra* and bell pavilions as main courtyard elements is proved by the quotation from the *Eiga-monogatari* above, describing their reflections in the central pond. They must have been on west and east, respectively, in the traditional balance. A detail of the record of the dedication ceremonies, *Hōjōji-kondō-kuyōki*, indicates that they were probably to left and right of the south edge of the pond (their natural position, if the Amidadō and Godaidō were similarly balanced to the north). At one stage in the procedure it was customary for the dancers to preface their performances by advancing to the foot of the "golden" hall to offer lotus flowers to the Buddha. In this case on their return to begin a series of dances, those dressed as Kalavinka birds and half of the

²²¹ A description of the Northern Sung palaces at K'ai-feng says: "Entering by the Hsüan-tê tower as the main gateway, (one comes to) the courtyard of the Ta-ch'ing hall (in which) are placed two tower-pavilions, in the manner of a Buddhist temple. In the upper storey of the bell tower is the office of the Han-lin Academy . . ." 入宣德樓正門乃大慶殿庭設兩樓如寺院鐘樓上有太史局.

²²² *Gunshoruijū*, *op. cit.*, pp. 263 (on timber), 268 (on hall: 瓦葺金堂...土地而鋪玉甃). For the general change in roofing and flooring techniques from Nara to Heian, see below, pp. 200-01, 202.

"Bodhisattvas" took up stations on the dance platform; while the "butterflies" and the rest of the "Bodhisattvas" "crossed over the bridge at the south of the central island, and went to straw mound (seats) on the platform of the bell pavilion."²³³ They must have been close to the southern end of the court, for the author of the *Eiga-monogatari*, describing the arrival of the Emperor, speaks of his looking out of his litter, while still outside the cloisters, and seeing "bell and *sūtra* pavilion and the southern corridors shining in the morning sun." It is not clear whether they were isolated within the court, or linked to it by spur corridors, or perhaps were on the lines of the north-and-south corridors, as second storey pavilions rising above the roofs of the latter. Such a relationship is frequently seen in the Tun-huang paintings (fig. 75),²³⁴ and was actually achieved at Hōryūji by the tenth century alterations of the original monastery plan. Either of the last two alternatives would suit another detail in the *Eiga-monogatari*, describing the position of the seats allotted to the various notables for the ceremony. According to this account, the wife of the Minister Yorimichi (Michinaga's daughter-in-law) was installed "in the corridor at the foot of the bell pavilion"; while the carriage of Fujiwara no Nagaie was placed "in the corridor on the south of the *sūtra* repository."²³⁵

It is probable that the cloister area was entered through gateways at either side as well as in front. The *Eiga-monogatari* says of the arrival of the Emperor that "his litter was carried to the southern staircase of the corridor on the north side of the west middle gate." His destination, a place set aside as a sort of Imperial Waiting-room for the preliminary ceremonies, is described in the *Kondō-kuyōki* as being "in the second bay from the east in the western corridor"; the reference must be to the portico west of the "golden" hall, closing off the rear of the main courtyard.²³⁶ This record says of his passage that "the Imperial Person descended from the August Litter; ascended to the corridor north of the middle gate, proceeding along the plank flooring on the east side; passed the hall of Amida on the same plank flooring, and entered the corridor west of the 'golden' hall, after having (halted) at the central bay of the Amida hall to make obeisance twice." The wording of the *Eiga-monogatari* for the same passage is, "He left his litter; passed in front of the temporary stand erected for the wife of the Regent (previously described as being in the "corridor south of the Amida hall"); and from the plank flooring of the Amida hall, went to the place where the August Seat had been prepared in the connecting corridor to the east (*higashi no watadono*)."²³⁷ This waiting place must be the same as that referred to in the other account, here being spoken of as "eastern" with reference to the hall of Amida, and there as "western" with reference to the "golden" hall. Neither description tells much more of the relationship between the two halls than that they were probably

²³³ *Do.*, p. 265. *Eiga-mon.*, p. 426.

²³⁴ E. g. Pelliot, *Grottes*, pls. xvi, xxxix, lxxx, etc.

²³⁵ *Eiga-mon.*, p. 425 鐘樓のもとの廊; 經藏の南の廊.

²³⁶ *Do.*, p. 427: 西の中門の北の廊の南の階; *Gunshoruijū*, *op. cit.*, p. 263.

²³⁷ *Gunshoruijū*, p. 264: 下御輿昇御從中門北廊東簀子敷經阿彌陀堂同簀子敷御金堂西廊於阿彌陀堂中心之間御拜二度
Eiga-mon., p. 427: 御輿寄せて降りさせ給ふ關白殿の御棧敷の前を渡らせ給ひて阿彌陀堂の簀子よりおはしまして東の渡殿に御座の所よそひておはします.

fairly close together. It is not unreasonable to assume that Amidadō and Godaidō stood on the axes of the north-and-south corridors, intercepting them and projecting beyond at front and rear in the same way as the Kondō. Such is the position of the analogous halls shown in the Tun-huang Paradise paintings. The supposition that they were near the northern end of the courtyard is reinforced by one more phrase in the *Eiga-monogatari*; which in describing the decorations of the Amidadō, speaks of the painted panels in the "connecting corridor of the northern aisle" (*kita no hisashi no watadono*).²³⁸ The word "*watadono*" which I have translated as "connecting corridor" means normally a short covered way leading from one palace building to another. In this case, it must refer to the section of the cloister corridor north of the Amidadō: being termed "*watadono*" 渡殿 rather than the usual "*rō*" 廊 because of its shortness, or because it was a part of the connection between the Amida and "golden" halls.

Outside of its main cloister area, Hōjōji possessed other elements of the traditional monastery arrangement, probably in their traditional positions. The *Kondō-kuyōki* speaks of "the rear courtyard, behind the 'golden' hall."²³⁹ It mentions no lecture hall, but that would have been the natural northern terminus of such a rear court, and doubtless existed in the completed design. As to equipment with pagodas, a dedicatory prayer of 1079 (recording a rebuilding operation after the great fire of 1058), is evidence for the fact that the original establishment possessed only one, and that at that time the number was increased to two.²⁴⁰ The wording—phrases like "dew dishes (of the spires) on east and west . . . 'wind bells' separated on left and right," and a reference to imitating the forms of the Green Dragon and White Tiger, classical symbols of east and west respectively, makes it clear that the two were laid out symmetrically in the old monumental tradition. The great south gate, often mentioned, must have lain to the south of these, as it had at Tōdaiji. There were a number of other buildings of varying sizes important enough to be mentioned by special dedicatory records or in the *Eiga-monogatari*, but impossible to locate except in a very general way within the general plan. Perhaps chief of them was the hall of Yakushi, dedicated in 1024; this was set on the east side, facing west, since Yakushi's Paradise is that of the east. Whatever its actual position, it must have stood in isolation; appropriately enough, its dedication record, the *Yakushidō-kuyōki*, mentions no other buildings or corridors as being used at the time of its ceremony, except the great east gate.²⁴¹ North of this, over a bridge, a hall of Shaka was set up in 1027. Others were an octagonal hall, a new hall, a hall of Kannon, a *samādhi* hall (*Sammaidō*), a hall of the tenth day fast (*Jusaidō* 十濟堂) etc.

The *Eiga-monogatari* gives a charming picture of the hum of pious activity rising from all these centers of worship in the great days of the monastery.²⁴² "Looking on this side

²³⁸ *Eiga-mon.*, xviii, "Tama no Utena," p. 445.

²³⁹ *Gunshoruijū*, p. 263.

²⁴⁰ *Kōji-ruien*, *Shūkyōbu*, iii, p. 409, gives the dedicatory prayer read at this time. The two "new" pagodas were those which had been brought up from the original Yakushiji at Asuka (note 80) 露盤之在東西也...風鐸之分左右也自擬青龍白虎之相.

²⁴¹ *Gunshoruijū*, pp. 271 ff.

²⁴² *Eiga-mon.*, pp. 453-4.

(one would have found), in progress an uninterrupted reading of the *Hokkekyō*, recited aloud by four or five men, palace liturgists and so on, of the highest qualifications. Had one stopped to listen, in sweetly solemn awe, he would have felt as if here at any moment Tahō-nyōrai might vouchsafe to make His appearance; and he would have made the silent prayer, 'In future lives innumerable and endless, may I always meet with this *Hokkekyō*, by which (the hearts of) all living thing are opened to the Doctrine, and guided toward the Paradise of the West.' Looking on that side (one would have found) ritual practises in continual performance, carried on by learned teachers (*Ajāri*) and priests to the number of twenty or so, garbed in white robes of purity. Looking again, (he would have met) a reading of the *Daihannyakyō*, held without break by some ten priests the year around. On this side were hung the Godairiki-bosatsu, and the *Ninnōkyō* was expounded; on that the *Mandaras* were suspended, and the burnt offerings of Amida and Sonshō-(butchō) were performed. Here were readings of the *Yakushikyō* and *Jumyōkyō*; there twenty or thirty men were occupied in reading through the sixty chapters of the *Nehangyō*, by the skipping method. Looking at the priests' quarters on this side, (one would have found) seven or eight charming young 'Masters of the Law,' joining their voices in harmony as they chanted the *Gusha* or intoned the *Yuishikiron*. Looking at the dormitories over yonder, (he would have seen) handsome lads studying the "Thousand Character Classic" and the "Book of Filial Piety." In this way, voices came from every side as the readers recited; voices from here and sounds from there could be heard, mingling all together without confusion; and he who listened to this and to that, in sweetly solemn awe of its loveliness, would have paid the deepest reverence, thinking that the Pure Land itself might well be thus.

"Farther on, twenty or thirty priests would be bathing themselves with water heated in the bath-tubs; while on this side would be four or five master sculptors, carving a worshipful Buddha, and a multitude of carpenters at work on a building, for at this time the project of (erecting the) Yakushidō had been decided upon"

The temple of Hōshōji in the Ōkazaki district of Kyōto, erected by the Emperor Shirakawa and dedicated in 1077, contained at that time the same major building elements as those of Hōjōji: a "golden" hall, containing again a 32 foot Birushana image; a lecture hall; Amidadō and Godaidō: *sūtra* and bell pavilions; and the usual corridors and gates.²⁴³ Here also no concrete evidence has been preserved; in addition, the dedicatory record is less precise than that of Hōjōji, so that while the *sūtra* and bell pavilions seem to have had approximately the same position near the front, the sites of the two subsidiary halls of worship are not made clear. The fact that they are mentioned as being in existence at the dedication, and yet are not spoken of as having played any part in the courtyard ceremonies, suggests that they were located somewhere away from the nucleus, doubtless balancing each other on east and west.

²⁴³ Cf. under Hōshōji in Ōoka's "Tendai Shingon no Jīn-kenchiku," *Bukk.-kokogaku-kōza*, xv. I know three somewhat varied versions of the dedication record of 1077: *Hōshōji-kuyōki* (*Gunshoruijū*, *Shakkabu*, pp. 249 ff.); *Shōryaku-genmen* 承暦元年 *Hōshōji-kuyōki* (*Zoku-gunshoruijū*, xxvii/1, pp. 125 ff.); and *Hōshōji-kuyō-shidai* 第次 (do., xxvi/2, pp. 327 ff.). Other related descriptions are collated in *Kōji-ruien*, *Shūkyōbu* iii, pp. 682 ff.

Hōshōji contained one remarkable feature not found in its predecessor, or so far as I know anywhere else in Heian monastery building. Its precincts, before being turned over to religious use, had been for generations the site of what was apparently a very large Fujiwara garden. Perhaps for that reason, the lake in its courtyard must have been exceptionally extensive; for on its central island in 1083 was erected an octagonal nine-storeyed pagoda, celebrated for its unprecedented size.²⁴⁴ Considering the formal character of the whole layout, there can be no question but that this rose on the central north-and-south axis; the dedication record of 1077 makes clear that the island on which it was built was inside the middle gate, in the cloister area. In this instance, then, Japanese monastery building returned at the end of the eleventh century to the ground-plan formula of Shiten-nōji in the Asuka period. The reason for such seeming archaism was perhaps again the influence of the Paradise picture, here of course of a different type from that followed at Hōjōji. One of the Tun-huang frescoes of the tenth century actually shows an octagonal pagoda on axis in front of the "golden" hall, although its size in relation to the other elements is much less than that reputed for Hōshōji. The one notice of the latter's pagoda which records a dimension is that of the fourteenth century history *Taiheiki* 太平記, where the account of its burning in 1342 calls it "crosswise lengthwise together 84 jō (i.e. 840 shaku), without peer in the Three Realms."²⁴⁵ It is difficult to understand what this refers to. The eighth century Tōdaiji pagodas, seven-storeyed and remarkable for size in their day, were approximately 320 shaku high, including spires, and were 55 shaku on a side. The 840 shaku certainly cannot have been either height or perimeter of the building itself. Ōoka in his discussion of Tendai and Shingon architecture has drawn attention to the fact that the dimension is actually just the width of two Kyōto blocks and a street between by the ancient city plan, so that the reference may have been to the size of the whole temple precincts. This seems an odd way of describing a pagoda, however, and

²⁴⁴ The versified prayer spoken at this pagoda's dedication is given in *Kōji-ruien*, p. 684, from the *Chōya-gunsai*. The stanzas relating to the site run:

"On the southern side of the Kondō, at the very center of the Jasper Pool . . . has been newly built a giant pagoda" 金堂南面瑤池中心...新造雁塔.

The second dedication text listed in n. 243 places an island—presumably the same—definitely within the main courtyard. The related excerpts, taken from different portions of the record, are:

"In the courtyard on the south, directly in front of the Buddha . . . going out 20 ft. or so from the platform (of the Kondō) were set up two high thrones (for the officiating priests) . . . South of these, some 20 ft., was erected the dance stage. . . . Going south from the dance stage some 50 ft. were set up two 6-bay tents of varicolored silks, as left and right-hand musicians' shelters. . . . Then the musicians, led by the Board of Ceremonial Music, crossed over the southern central island, and went to the foot of the great gateway, to meet the assembled priests and to strike up music. . . . Then the assembled priests, with the Leaders of Ceremonial at their head, crossed over the central island's bridge, passed by the front of the musicians' shelters, and went to take their seats inside the left and right-hand cloister corridors."

Clearly the main courtyard must have been very large; it was around 100 ft. from the hall platform to the musicians' shelters, and the area between these and the gateway had to contain a large pond, with an island spacious enough to hold, later, an exceptionally large pagoda. At Tōdaiji the courtyard in front of the Kondō seems to have been equal in depth to the hall's length, 290 Tempyō shaku (Amanuma, *Shiyō*, pl. 21). An equivalent scale must have been necessary at Hōshōji.

²⁴⁵ *Kōji-ruien*, *ibid.*, pp. 685-6. 横堅共に八十四丈. The number 84 may also be suspected, since it typically accompanies Indian fable.

perhaps the best explanation is the simplest, that the figure given by the *Taiheiki* has been wrongly copied. A tenth of the amount, presuming that the original description may have said "84 *shaku*" rather than "84 *jō* (one *jō* equalling ten *shaku*), would give a not impossible dimension for one side of a platform square, within which the octagon of the pagoda may have been inscribed.

The last Imperial foundation of the Heian period on a scale comparable with Michinaga's work seems to have been Sonshōji, dedicated under the patronage of the Emperor Horikawa in 1102.²⁴⁶ The plan of this monastery, at least as regards its nucleus, seems to have represented a return to Nara formulae. The textual evidence gives no indication of any courtyard buildings comparable to the Amidadō and Godaidō of Hōjōji, and at the same time makes clear that the bell and *sūtra* pavilions in this case were returned to their former positions outside of and behind the main courtyard. Thus at the climax of the dedication ceremonies, when the assembled priests in two long lines on left and right executed a great double *pradakṣiṇa* or *daigyōdō* around the main buildings:²⁴⁷

"They emerged from the courtyard by the north-east and north-west doors (in those bays of the cloister corridors, temporary bridges had been placed over the northern gutters). On the left side, they passed west of the *sūtra* repository to the north of the lecture hall; then they turned eastward and came back past the front of the hall of Yakushi, and reentered the courtyard by the north-east door, making a *grand pradakṣiṇa, daigyōdō* When this was finished, the right-hand side in turn crossed past the bell pavilion on its east, and continued to the north of the lecture hall; then they turned westward, and making a circuit of the courtyard, re-entered through the north-west corner of the cloisters"

Sonshōji also contained eastern and western pagodas from the start.²⁴⁸ This seeming archaism may perhaps be explained by the political circumstances of the age in which the temple was erected. In the last century of the Heian period, actual administrative supremacy passed from the Fujiwara to the Imperial house; being centered, however, not in the reigning Emperor, but in some predecessor who had abdicated and taken monastic vows. This partial return to the Imperial rule of the Nara period, as a reaction against the usurpation of the Fujiwara clan, may well have involved a deliberate attempt to minimize Fujiwara prestige in the arts. Thus the ground-plan of Sonshōji seems a wilful renunciation of the precedent set a century earlier by Michinaga's Hōjōji, in favor of the Imperially set standard of Nara.

The last Heian monastery layout worthy of special notice is that of Moetsuji 毛越寺, erected in the early twelfth century by the great Fujiwara lords of the north, Kiyohira

²⁴⁶ Cf. Ōoka under Sonshōji. Dedication record text: *Sonshōji-kuyōki* (*Gunshoruijū, Shakkabu*, pp. 254 ff.); also in *Kōji-ruien, ibid.*, pp. 690 ff.

²⁴⁷ *Gunshoruijū*, p. 259.

²⁴⁸ *Do.*, p. 256. The day's procedure at Sonshōji began at 4 a. m., when services were held by a Shingon high priest, at the august eastern and western pagodas. Alongside the central shaft of each was buried a gilded bronze vase, containing the 5 Perfumes and the 5 Treasures, and bound about by a 5-colored cord. The icons were installed within the pagodas; and at the 4th storey level of each was placed a gold bronze cylinder, containing copies of the *Hokkekyō* and the *Hannyashingyō*; while among the rafters at this level were secreted copies of the esoteric *Himitsu-shingonkyō*.

清衡 and Motohira 基衡, at Hiraizuma near their other large monastery of Chūsonji.²⁴⁹ The general plan here marks a real evolution rather than the retrogression of Sonshōji. Only ruins remain today. At the south are the bases of a great south gate; some distance north of these, on the main axis, stood the Buddha hall, with a lecture hall behind it. Between the sites of the gateway and the Buddha hall is a lake; within this is an island, originally reached by a bridge on axis from the south. Verandah corridors led from either end of the Buddha hall, turned south, and ran down to terminate at the edge of the pond in the two pavilions housing bell and *sūtras*. Here was clearly a less formal version of the Hōjōji standard, appropriate to its rural situation and to the half metropolitan, half provincial characters of its donors. More than this, the Moetsuji plan represents the closest known parallel in religious architecture to the layout typical of the great aristocratic mansions of Heian, the so-called *Shinden-zukuri* 寝殿造 (fig. 79). Its Buddha hall stood like the main building or Shinden of the mansion, facing a lake with an island at the center, roughly on axis and reached by a bridge. The almost exact lay equivalent of the monastery corridors were colonnades, turning forward in the same way and ending at the water in pavilions. The Moetsuji bell and *sūtra* pavilion sites are surrounded by garden rocks; on each side, as in the Heian villa, a rivulet ran down from the mountain behind, crossed under the corridor, and tumbled through the rocks into the lake. Moetsuji thus illustrates the close similarities which could exist in late Heian between domestic and religious architecture on a level of comparative formality, just as the greatest metropolitan establishments like Hōjōji shared much of the character of the courts of state in the Imperial palaces.

The Moetsuji design is suggested, on a much smaller scale, by the "phoenix hall," Hōōdō, at Uji (fig. 78), built by Michinaga's son Yorimichi at the mid eleventh century.²⁵⁰

²⁴⁹ Cf. Ōoka under Moetsuji; related texts in *Koji-ruien*, *Shūkyōbu*, iv, pp. 778-9. The most important quotation is one dated 1189 from the *Azuma-kagami* 吾妻鏡, a contemporary journal of the Shogunate at Kamakura; which lists Kondō, Kōdō, Jōgyōdō, 2-storeyed gate, bell tower, *sūtra* repository, etc., and states that the major monastic buildings were some 40 odd "halls and pagodas," while there were 500 odd priests' dwellings.

²⁵⁰ Cf. Ōoka under Byōdōin; related texts in *Koji-ruien*, iii, pp. 1080 ff. Because of the beauty of its location, Uji had long been a favorite place of retreat from the bustle of the capital; the Emperor Yōzei (r. 876-84) had maintained a detached palace there, and the Regent Michinaga in turn made the place a "mountain villa" around 1000. His son Yorimichi, according to the *Fusō-ryakki*, in 1052/3/28 "relinquished the Uji villa, to make it into a temple; installed a Buddha image, began the practise of the *Hokke-sammai* (*Samādhi* attained through the *Lotus Sūtra*), and called the place Byōdōin. In 1053/3/4, being then Kampaku and Saidaijin (Regent and Minister of the Left), he erected a great hall within the Byōdōin, in which was enshrined a 16 ft. image of Amida. 100 high priests took part in the ceremony of its dedication, which was patterned (as usual) on the *Gosai-e*. Image and adornments had no parallel in ancient or modern times."

It is generally agreed that the building here referred to was the existing "phoenix hall," Hōōdō (for which see below, pp. 200 ff. and note 353, for details and ornamentation). The plan has been extensively discussed by Amanuma, in his "Architecture of the Amida Hall in the Heian period" (in Japanese), *Bukkyō-bijutsu*, x, Dec. 1927, pp. 20-23 and pl. 2; especially with reference to its geometrical relationships. The Byōdōin contained many other buildings, of course, to complete the normal monastery equipment.

Parallels to the design of the Hōōdō are clear in the earlier, simpler Tun-huang Paradise backgrounds; e. g. that of cave 41 (Pelliot, pl. lxxiii). There the differences are chiefly that the little pavilions straddling the corridor roof at the corners are octagonal, instead of square; and that the corridors run forward some

Here the end corridors are much contracted, and the pavilions in which they end are only decorative terminations. It has been frequently stated that the Hōōdō plan shows the influence on Heian Buddhist architecture of contemporary domestic practise as standardized in the *Shinden-zukuri*. Certainly the basic elements are the same, as they were at Moetsuji; but a somewhat wider critical perspective should indicate that the common source of both designs was the Chinese palace-or-temple formula of the T'ang period, still visible in the standard backgrounds of the Amida Paradise pictures.

THE ICON HALL

THE TRANSITION FROM NARA TO KAMAKURA:

At the outset of the Heian period, the Japanese icon hall must have followed the T'ang-inspired precedents of Nara in all essentials. The new capital Kyōto itself, as laid out in the last years of the eighth century, was a more grandiose Nara, with monumental buildings of pure Chinese style. Its first great guardian monasteries, Tōji and Saiji, established under the control of Nara Buddhism, were laid out on long-familiar lines. The "golden" hall and lecture hall of the former, which stand today in rebuilt versions of Momoyama and Edo respectively, show in the same way the chancel-and-ambulatory ground-plans of Chinese and early Japanese practise. The cross-sections which follow these column-axes have been modified above by later Japanese methods of roof-construction, but in their basic subdivision of space are entirely traditional.²⁵¹

The evidence of the many buildings remaining from the Kamakura period proves that by the thirteenth century this orthodox formula had become an archaism, used only in the most conservative currents of religious architecture for the re-erection of earlier halls on their original ground-plans. Its place as the standard of progressive building had been usurped by a new hall type, radically different in all fundamentals of design, and as thoroughly Japanese as the earlier had been Chinese. Some foreknowledge of the developed Kamakura form is essential to an understanding of the evolution accomplished during the Heian period. For this reason a standard example will be described in plan and section below, as a measure of change between the eighth and thirteenth centuries.

The main hall of Saimyōji in Shiga-ken has no certain date, but its style is unquestionably that of mature Kamakura.²⁵² In ground-plan (fig. 77) the proportion of the whole building is at the outset markedly unlike the Nara formula, being a near square, seven bays by seven, instead of the old oblong. Within that area, the simple convention of chancel and ambulatory has been supplanted by a new complexity. The traditional terms *naijin* and *gaijin* are still used, but no longer mean a relationship of center and circumference.

distance, to stop against a single-storeyed building (a subsidiary icon hall, like the Hōjōji Amidadō and Godaidō), instead of being abruptly terminated.

²⁵¹ Kondō of Tōji; see below, p. 284.

²⁵² Cf. Hattori, *N-kokenchikushi*, Kamakura vol., pp. 90-94; Amanuma, *Shiyō*, p. 254; *Zūroku*, Kamakura vol. i, pp. 268-74. Traditionally founded in the Shōwa era (834-47). Later history vague. The monastery except for its nucleus of Hondō, pagoda, and gateway (high on the hill above the rest) was burned down by the troops of Nobunaga.

The hall is divided sharply into two halves by an east-to-west partition—grilled doors and a grilled transom above—which separates a front, public space—the new *gaijin*—from that devoted to secret worship at the rear, the *naijin*. The front half, seven bays by three, consists of a single bay running around front and end facades, and an open area five by two. In many buildings of this type, these two front spaces are on occasion separated by a railing, the aisle serving for public worship and circulation, and the inner, open area—described as *chūjin* 中陣, “intermediate space”—being reserved for priests and important lay worshippers.

On the northern side of the grilled partition lies the chancel, with its platform for images and altar furniture; at Saimyōji an area three by two. At either end of the chancel a passage one bay wide leads to the rear. The adjacent outer “aisles,” remnants of the old ambulatory, are no longer for circulation, but serve as small side chapels housing minor altars. The rear of the hall, or *kojin* 後陣, opens into a spacious room two bays deep, used for robing, the preparation of offerings, etc., and as an additional place of worship.

All these spaces are variously covered. The chancel preserves memories of the Chinese style by rising into a beamed “open roof,” which for all its paraphernalia of rafters and purlins is purely decorative, without any connection to the actual roof covering the building. A coved, coffered ceiling is placed over the open area, *chūjin*, on the south. The public aisle and the chapels into which it runs are covered by exposed rafters, in traditional fashion. Over the utilitarian room at the rear is a treatment never seen in Nara architecture, but characteristic of the later Japanese style. The outer half of the room, corresponding in the general structure of the building to what is elsewhere a single bay “aisle,” is enclosed in the normal aisle fashion by exposed rafters. The inner half is covered by a flat coffered ceiling. This is a repetition of the ceiling contrast in the public space on the south. In the latter, however, the junction between the two types of covering is concealed as it had been in Nara, by a line of interior columns with bracketing and beams. At the rear, such columns do not exist. Instead, the line of separation is a strong longitudinal beam, supported by posts which rise from the transverse girders crossing between the columns on either side of the room.

Discussions of Japanese architectural history frequently proceed from the assumption that the highly developed icon hall seen at Saimyōji and frequent among other Kamakura remains, was a creation of the Kamakura period. The supposition is based on the indisputable premise that no building of an earlier age even remotely comparable to the mature style has been preserved. As will be seen in more detailed analysis in a later section, the surviving halls of the Heian period reproduce the Nara formulae as late as the twelfth century. The changes which they concede to a radically altered religious and social environment are so slight as to seem on first inspection almost without significance. It is wholly erroneous, however, to infer that these few monuments, selected by the accidents of preservation alone, may stand for the whole of Heian achievement. The one-sided and misleading character of their evidence is made obvious by Heian texts describing other buildings, now lost. Through those, it is possible to trace the successive stages of an advance toward the Kamakura type of Saimyōji, an advance which had already gone far by the tenth century.

In later sections I shall discuss both the character of existing Heian remains, and the indications of more progressive architecture furnished by contemporary temple records. The section immediately following attempts a preliminary summary of the causes behind the progress; the religious environment of Heian architecture, and specifically the changes in Buddhist worship brought by the new sects of Tendai and Shingon, which made necessary a departure from the once satisfactory Nara standard.

THE INFLUENCE OF ESOTERIC BUDDHISM:

The full tide of esoteric Buddhism which swept over Japan in the ninth century brought with it conceptions of worship destined to produce marked changes in Japanese religious architecture. As factors in the metamorphosis, two aspects of esoteric practise were of prime importance. A new complication of ritual furniture and new foci of adoration necessitated an extensive rearrangement of the chancel. More important still, a new emphasis on secrecy of worship demanded a potentially complete isolation of the chancel from profane gaze.

It is doubtful whether the full complication of Japanese esoteric practise was realized in the earliest generations of Tendai and Shingon in Japan. The general standard—from which all subsequent deviation was in details only—must have been set by mid Heian, however, and may be accepted at least from the tenth century on as a governing factor in the development of esoteric Buddhist architecture. The secrecy of certain images and of major ritual furniture must have been from the start a first principle of the two new sects. The most solemn rites in these orders are performed—today as in Heian—in a privacy excluding even the great majority of priests. The innermost sanctuary at such times, the *dōjō* 道場, is screened on all sides. Outside it the lesser members of the order, seated or standing by turns, chant an accompaniment to the ritual. Within may be only a single priest, of great learning and pious achievements. At the time of ritual performance, the ritual enclosure is imagined as suffused with the presence of Divinity, one Buddha or a myriad; the practitioner at the ritual altar becomes himself the deity addressed. The terrible exaltation of such a moment is reserved for the few who have prepared themselves to be worthy of it, by long training in the preliminary stages of esoteric doctrine. In the culminating ceremonies, the priest before the altar, shaping the *mudras* with his fingers, moving the symbolic utensils, chanting the *sūtras* and *dhāranis*, is alone before the inexpressible, manifest for a brief space only to him (fig. 82).

For normal purposes, the equipment of this place of mystery follows a rigidly prescribed standard. The method of space utilization (figs. 82, 157, 187) is still visible in many Tendai and Shingon halls of the Kamakura period, and from textual evidence must have been the same in comparable buildings of Heian. At the rear against the north wall is the altar with images, called *shumidan* in memory of Mt. Sumeru bearing the Paradise of the Gods upon its summit. In front, on the main axis, stands the low, square, ritual altar, *daidan* 大壇, with its utensils symbolic of the highest mysteries.²⁵³ Its surface is bounded by a

²⁵³ For a detailed description of esoteric ritual furniture, cf. Kambayashi 神林, "Shingon no Gyōjisahō" 真言の行事作法, *Bukk.-kokogaku-kōza* ii, April 1936. All of these objects are listed in the records

guardian cord of the five colors, suspended between posts of *vajra* shape. At the corners and center of the altar stand vases bearing lotus of five different colors; at the middle may be placed a miniature relic pagoda. Along the southern side of the *daidan*, or on all four sides, are set out small dishes of prescribed number, containing offerings of food or the substances used in the ritual, holy water, incense to be smeared on the practitioner, and flower chaplets. Before the seat of the officiating priest, his sacred implements, ornamented by the mysterious *vajra*, are laid on a lotus-shaped tray. At either side of the altar is a lamp standard; between *daidan* and *shumidan* there is usually a long high table, to hold offerings of flowers and food, and an incense burner. The seat of the priest, directly in front of the ritual altar, is a square dais, the *raiban* 禮版; on his right is set a rack, from which is suspended a metal sounding-plate; on his left is a low table, bearing additional ritual utensils.

This standard combination of elements necessarily occupies a considerable area. In the critical dimension of depth, the *shumidan* (varying widely in size according to the number of images displayed) takes up at least ten feet. The offering table, two feet or more in width, stands several feet in front. Approximately equal distance separates the table from the *daidan*, which with its dais usually requires at least ten feet of depth. For processional purposes and general convenience, an appreciable interval is necessary between the dais and the front partition of the chancel; so that the free depth of the latter in front of the image altar, in a building of any degree of pretentiousness, should be at least 20 feet. The normal complex of table, ritual altar, and dais occupies only a small part of the chancel's width. In addition to it, however, the chancel may contain, as equally important foci of worship, the two esoteric *Mandaras* in pictorial form, hanging on east and west between the end columns; each of these is usually furnished its own ritual altar, approximately the same size as the *daidan* at the center. If space permits, the practise of the temple may also include supplementary altars within the sanctuary precinct, like the *gomadan* 護摩壇, an elaborate brazier for burnt offerings.

The Nara formula of chancel and ambulatory was obviously designed for no such complicated purposes as those of Tendai and Shingon, with their demands for secrecy of worship and a spacious chancel floor for the disposition of ritual furniture. In the eighth century at the Hokkedō, as at Hōryūji, the entire chancel area is filled with a platform of images. Even at Tōshōdaiji, where the platform has been proportionately diminished in depth, the free area in front is no more than ten feet across. Such spatial disposition must have been made possible in the eighth century by comparatively simple ceremonial procedure. The ritual furniture of the time was probably no more elaborate than that shown in the typical Tun-huang painting as evidence for the practise of T'ang, a stand bearing flower-vases and incense-burner, and a cushion or dais for the officiating worshipper. The complex characteristic of esoteric ceremony could have been accommodated in Nara only by halls even larger than Tōshōdaiji.

The change made necessary by Tendai and Shingon was effected in this regard

of Tendai and Shingon temples during the Heian period, and appear in the very detailed accounts of ceremonies which were written down in Kamakura, but certainly were not originated at that time. Cf. *Zoku-gunshoruiju*, 26/1, for a large number of Kamakura period descriptions.

primarily by a drastic diminution in size of images, from colossi of a dozen feet or more to life-size or less. The corresponding decrease in platform depth freed valuable floor space for service; in addition the chancel was frequently made a bay deeper than had been customary in Nara.

The requirement of secrecy was less easily adjusted. The aisle of the original Hokkedō must have served alike for practitioner, monks, and (more rarely) laymen. The space south of the platform could not have been screened off without making the *pradakṣiṇa* or *gyōdō* impossible; if the laymen were excluded from the ambulatory, there was no place for them except out-or-doors. In buildings of larger size, in which the *shumidan* occupied only a part of the chancel, the problem of combining secret ceremonial and lay attendance under a single roof could have been hardly less difficult of solution. The screening off of an enclosure of Nara dimensions, around a great platform perhaps five bays long, would have been itself inconvenient, and would have reduced the hall, again, to the comparatively small and awkward circuit of the aisles. Even from the standpoint of Nara Buddhism, the ambulatory formula must have been something of a straitjacket, providing excessive space on ends and rear where it was not essential, and rigidly limiting the amount available on the south where the need was greatest. In Shingon Buddhism, the aisle itself sometimes became a place of secret worship, still further limiting the area available for circulation and more public performance.

This is known to have been the case in the Shingonin 眞言院, the chapel maintained by the order by the Imperial Palace from the time of Kōbō-daishi on, and hence one of its most important centers of worship.²⁵⁴ In the performance of the great ceremonies periodically held here for the benefit of the Imperial House, almost the whole of the building was used for one form or another of esoteric ritual. The chapel had a simple seven by five form of chancel and ambulatory (fig. 80). The central area, in the celebration of the week-long *Goshichinichi-goshuhō* 後七日御修法 (or "Ceremonies of the Second Week") in the first month of every year, was closed by curtains. Along its north wall were hung the pictures of the Godaion 五大尊, the Five Great Gods of Wrath, each with a stand for offerings in front. On the east wall was hung the *Taizōkai-mandara*, on the west the *Kongōkai*; each of these had in front of it a ritual altar, with the usual complement of dais and stands. The enclosure contained also a table bearing the robes of the Emperor, as a symbol of his presence. Outside the curtain in the northwest corner of the "ambulatory" was a smaller screened enclosure, holding an altar for burnt offerings made to "increase advantages," *zōyaku-goma* 増益護摩. South of this, along the west wall, was another enclosure with an altar of different form for burnt offerings made to "dispel calamities," *sokusai-goma* 息災護摩. In the northern aisle, to the east of the center, was a fourth screened area, holding a Shōden 聖天 altar, at which offerings were made to the twin elephant-headed deity Shōden (Ganeśa) to secure protection against invasion of the precinct by evil spirits. Along the outer wall of the east aisle were hung the pictures of the Juniten 十二天, the Twelve Gods, of Fire, Water, Earth, etc., with an altar for them

²⁵⁴ The architectural equipment of this complex, and its icons, are listed in an inventory included in the *Kanchō-goganki* 灌頂御願記 by priest Ninkai 仁海 (935-1046); *D-n-bukkyō-zensho*, *Yūhōden-sōsho*, iv, p. 492. For description of ceremony, see Kambayashi, *op. cit.*, under *Goshichinichi-goshuhō*.

below. The monks not engaged in performing services before these altars sat along the south aisle.

It is obvious that such use of the aisles as well as the chancel for worship must have greatly hampered the conventional ambulatory *pradakṣiṇa*, or even have rendered it impossible. Here is the first sign, therefore, of a conception of the rite of circumambulation which so far as I know is peculiar to Shingon and the aspect of Tendai most closely allied to it. In those ultimate reaches of esoteric Buddhism, the icon in picture or image form is no longer the object of the *pradakṣiṇa*. The focus used instead—often for a series of complicated marches and countermarches—is the ritual altar, or else the whole building.²⁵⁵ The change removes for these sects the one liturgical reason for the existence of the ambulatory. Elsewhere in Japanese Buddhism, the possibility of a passage behind the *shumidan* has always been maintained. In a number of esoteric halls of late date, however, the final step has been taken of moving the image platform against the rear wall of the building, liberating the entire area in front of it for worship; and therewith eliminating the last vestige of Nara and T'ang tradition.²⁵⁶

It is clear that the laity must have been completely excluded from the Shingonin, at least during the performance of its most solemn ceremonies. Even under more normal circumstances, when the ambulatory was left free for seating or circulation, the use of the traditional hall must have been reserved very largely for the clergy on formal occasions, whether the rites performed were strictly esoteric or not. An almost complete lack of textual evidence makes it impossible to say precisely how much of the hall interior was available for lay worship during the Nara period, or the T'ang dynasty. Two cases for which information is available deal with ceremonies of a general, even semi-public, character, and show even then a complete reservation of the hall proper for clerical attendance.²⁵⁷ One was the great maigre feast held at K'ai-yüan-ssü in Yang-chou in 838, and witnessed by the Japanese pilgrim Jikaku-daishi. His careful description mentions the fact that the monks assembled at dawn in the east, north, and west aisles of the lecture hall (presumably leaving the southern aisle free for ritual). Lay attendance included the high officials of the district; in the ceremonies at the lecture hall which prefaced the actual feast, these remained in the courtyard. The highest among them, the Imperially appointed Minister of State and the Commander-in-chief, were permitted to advance as far as the doors of the hall, but apparently did not enter; the demands of convenience were met by tents set up in the court. A parallel case is illustrated in the early fourteenth century Japanese picture-scroll *Kasuga-gongen-reikenki* 春日權現靈驗記. The service here shown is the annual *Yuima-e* 維摩會, devoted to the exposition of the *Vimalakīrti Sūtra* in the lecture hall of Kōfukuji. The congregation at either side of the great altar is entirely clerical. The lay world, represented by a figure as illustrious as the Imperial Envoy, is in attendance—outside the building, in the open air (fig. 81). The painting is late, but probably

²⁵⁵ Cf. under *Gyōdō* 行道 in the *Mikkyō-daijiten*, where diagrams and descriptions of the esoteric circumambulations are given.

²⁵⁶ See below, p. 251.

²⁵⁷ K'ai-yüan-ssü; see Appendix II. *Kasuga-gongen-reikenki*; published in *N-emakimono-shūsei*, vols. iii-iv. The ceremony here illustrated is one presided over by a high priest of Tōdaijō, Hōzō-sōzu 法藏僧都 (904-68).

represents a practise as old as the highly traditional *Yuima-e* itself; and so may be traceable as far back as the Nara period. The building follows the ambulatory formula natural to its eighth century date of first erection (interior columns are omitted in the picture for convenience). If the ceremony were to be held in any degree of privacy, all except those professionally concerned had of necessity to be excluded entirely.

Such was the stage of monastic seclusion with which the esoteric orders must have entered the Heian period. They left it, as we have seen, with the hall type of Saimyōji; a new ground-plan in which their privacy was still maintained, but by a compromise with the world. Buddhism was immensely popular in the centuries of Kyōto supremacy, serving at once as a means of dealing with the troubles of this life, as a guarantee of perpetual bliss in the next, and as a source of the most fashionable diversion in circles of gentility and elegance. A vivid description of the crowds who thronged to hear a popular preacher in the early eleventh century, filling every available foot of seating space, is given by Sei Shōnagon in her "Pillow Book," the *Makura-no-sōshi* 枕の草紙.²⁵⁸ Such meetings were of course not characteristic of esoteric Buddhism in its basic doctrinal sense, but the eclecticism of Heian religion made the secret only a part of actual esoteric practise. The all-inclusive Tendai, in particular, fostering a simple faith in Amida as its greatest asset, surrounded its central mysteries with a wide periphery of public ceremony. For the pompous purposes of the Heian Court, again, official attendance at services in behalf of the Emperor, the country, or a great Fujiwara, was essential even when the principal rites were invisible. The audience who attended a public or semi-public rite in one of the temples of the capital, to enjoy the sonorous beauty of the chanting, the bright play of colors in the monastic robes, the dignity of the movements, and perhaps the dazzling glory of the altar with the Buddha half seen through a shimmer of gold, had no intention of doing so in avoidable discomfort. It was impossible to expect persons of gentle birth to endure for generations the cramped inconvenience of an ambulatory already devoted to the movements of priests; or worse still, if the buildings were small or the proceedings inside it secret, to wait for the passage of a procession under the cloister galleries, or in the open air. The Imperial Envoy to the *Yuima-e* of Kōfukuji attended outside the closed doors, under the sky, even in the fourteenth century, but doubtless because of the persistence of an immemorial tradition. The procedure of the meetings must have been fixed in the Nara period, like the architecture which accommodated it, and the conservatism of the ancient capital admitted no change. We shall see in a later section how inconvenient the old ambulatory scheme proved in the main Tendai hall on Hieizan in the tenth century.²⁵⁹

Again, the adjustment of Heian Buddhism to a more comfortable and efficient accommodation of its worshippers was brought about not merely by pressure from without; the influential clergy themselves were noblemen, accustomed to delicate living, and often perhaps as keenly appreciative of the social aspect of the ceremonies in which they took part as their audience. The highest among them were actually retired Emperors, who brought into their religious life the habits of the palace, and continued a ghostly sway under condi-

²⁵⁸ Cf. A. Beaujard, *Les Notes de Chevet de Sei Shōnagon*, Paris, 1934, pp. 37-9, 40-1.

²⁵⁹ See below, pp. 163 ff.

tions not greatly altered. A radical readjustment of the traditional ground-plan was clearly necessary, both to provide a more convenient seating arrangement—concentrated in front of the altar, with a separation of audience and clergy—and to make possible a formal attendance within the building even when the principal rites were held in secrecy. A later section will take up the various methods used during the Heian period to achieve these ends, in buildings long lost but attested by written or pictorial evidence. It will then be noticeable that the solution subsequently developed into the Kamakura type of Saimyōji presents many striking analogies with the ground-plan of Heian palaces: a comparison which suggests that the influences determining the type were secular as well as religious.

EXISTING HEIAN HALLS:

In plan almost all Heian remains follow the old formula of chancel and ambulatory. There are wide variations of proportioning in the buildings so laid out. Thus the Amida halls of Hōkaiji²⁰⁰ (fig. 84), Kōzōji, and Shiramizu, and the Chūsonji Konjikidō are all

²⁰⁰ Hōkaiji Amidadō: cf. Ōoka, *op. cit.*, under Hōkaiji; related texts in *Koji-ruien*, iii, pp. 1061-3. The site had for generations been a villa of the Hino 日野 family (an offshoot of the Fujiwara). According to the Enryakuji history, *Eigaku-yōki*, it was in the time of Hino no Sukenari 資業 (988-1070) that a temple was erected, called Hōkaiji, and a great Buddha made (which enshrined within itself an icon of 3 inches, made by the Tendai founder Dengyō-daishi, which an earlier Hino lord had received from Jikaku-daishi on Hieizan). Temple tradition quoted in the gazetteer of the district, 雍州府志, states that this was an image of Yakushi; the main building of Sukenari's foundation was a Yakushidō (which remains today in a Muromachi re-building).

The date of erection of the existing Amidadō has been much disputed. The temple seems to have had several buildings of that name, from the late 11th to the late 12th century. Ōoka lists 5 possibilities, based on different texts. The problem has also been studied by Adachi, in *Tōyō-bijutsu*, xx, March, 1934, in greater detail.

(1) The *Chūyūki* (by Fujiwara no Munetada 1062-1141) records in several entries that a building from Kyōto, there called the Ichijōdō 一條堂 (from its location in the "1st Ward" Ichijō), was pulled down in 1119; and its materials were used to set up a "new hall" 新堂 in Hōkaiji, north of the main hall. The "new hall" is described as "3 ken 4 men, 2-storeyed" 三間四面二皆, its *moya* 母屋 or chancel being one of 3 bays, and its icons a Trinity. For the meaning of these terms *ken* and *men* see below, p. 162; the phrase means that the chancel was 3 bays across, and was surrounded by an aisle on all 4 sides. Adachi believes that the term "2-storeyed" (皆=階) must refer to a building with a true upper floor, and not one merely provided with a *mokoshi*, or lower skirting gallery, which would give it two roofs. None of this can with any persuasiveness be applied to the existing Amidadō, where the chancel is only a single bay square, where the icon is single, and no second floor exists. It is known that in the "new hall," three 16 ft. Amida figures were enshrined, so this was a new Amidadō. There must have been an old Amidadō, presumably still existing, to require the distinction. In fact:

(2) the *Chūyūki* records that in 1118, "while the Ichijōdō was not yet erected, its Buddhas were temporarily installed in the Amidadō." Also in the section for 1127, this last is spoken of again as the "original 16 ft. (image) hall." Adachi believes that the latter's date of erection may be pushed back at least earlier than 1098; for in that year the *Chūyūki* notes that "a 16 ft. Buddha was enshrined in a small building north of the main hall; when one confronts this image, its august measurements, as if by command, reproduce those of the Hino Buddha" 御寸法奉移日野佛. Presumably the "Hino Buddha" was that enshrined in the old Amidadō. On the other hand, an entry for 1092, relating to the temple, mentions only the Yakushi enshrined by Hino Sukenari, and a Kannondō erected by his son Sanetsuna, then deceased. It may be inferred that the Amidadō was built between 1092 and 1098, though the evidence is not very

square in plan, with varying numbers of bays.²⁰¹ The main halls of Ōjōgokurakuin and Fukiji are actually somewhat greater in depth than in length. The Murōji "golden" hall, the Kōryūji lecture hall (fig. 86), and the Kami-daigo Yakushidō (fig. 85) are normal oblongs. At the opposite extreme, the main hall of Jōruriji is a long, narrow rectangle, eleven bays by four (fig. 87).²⁰²

strong. An entry for 1156 in the diary *Hyōhanki* 兵範記 by Taira no Shimbei 信範 speaks of the Amida of the "16 ft. hall" as being by the sculptor Jōchō 定朝 (d. 1057). This might be taken as evidence that the present Amidadō was a part of the first erection of Hōkōji, around 1046; but Adachi believes that the existing image stylistically cannot be so early (Jōchō's style is attested by his Amida in the Hōdōdō, around 1053), so that the attribution in the diary is wrong. At least, according to Adachi, it shows that the "original" Amidadō and its icon were in existence in 1156; and this disproves the theory held by some, that the now existing hall was a re-building of the original, since stylistically it could not date in the latter half of the 12th century.

(3) The stylistic argument seems to rule out an Amida hall of undefined size or shape erected by a later Hino, Sukenaga 資長. A preserved dedicatory prayer speaks of this building as having paintings of Amida's Welcome on its walls, and as having been erected by Sukenaga as Chūnagon, a title which he held from 1167 to 1175. The existing Amidadō shows no signs of any such paintings (while preserving others of Heian style), and from its details does not seem so late.

Amanuma, *Shiyō*, pp. 189 ff.; *Zūroku*, pp. 262-7; "Amida Hall," *Bukkyō-bijutsu*, x, pp. 23 ff.

²⁰¹ *Kōzōji*: cf. Ōoka, *op. cit.*; Amanuma, *Zūroku*, pp. 300-1; "Amida Hall," pp. 30-1, and illustrations. The latter quotes a gazetteer 観聞志 to the effect that one of the beams bears an inscription, much defaced, saying that it was rebuilt in 1177, and that the donatrix was the wife of Hidehira, the same Fujiwara lord of the north who completed Moetsuji and Chūsonji.

Shiramizu: cf. Ōoka; Amanuma, *Zūroku*, pp. 296-9; "Amida Hall," p. 30. Traditionally built by Hidehira's sister, the nun Toku 徳, in 1184, in imitation of the Konjikidō of Chūsonji (q.v.).

Chūsonji Konjikidō: cf. Ōoka; Amanuma, *Shiyō*, pp. 192-4; *Zūroku*, pp. 302-7; "Amida Hall," pp. 27-30 and illustrations. Related texts in *Kōji-ruien*, *Shūkyōbu*, iv, p. 769 ff. A dedicatory prayer is preserved in the temple's *sūtra* repository, dated 1126, which lists and describes the principal buildings offered to the Buddha at that time by the great provincial lord Kiyohira. The Konjikidō is not listed, being very small and intended as a mortuary chapel for the donor. An inscription on one of its beams records that it was set up in 1126 by Kiyohira; and that those who worked on it included one master carpenter, two smiths, and 15 workmen. In 1288, on orders from the Kamakura Shogunate, the Konjikidō was enclosed within a larger building (also remaining), to preserve its gold lacquered exterior. For decoration, see p. 206, below.

²⁰² *Ōjōgokurakuin*, or *Sanzenin*. Cf. Ōoka; Amanuma, *Zūroku*, pp. 223-5; "Amida Hall," p. 33 and illustrations. According to temple tradition, built in 985 as a retreat for the nun Anyō 安養, sister of the celebrated Eshin-sōzu 恵心僧都. The exterior much altered as a result of restorations in the 17th century.

Fukiji Ōdō: cf. Ōoka; Amanuma, *Zūroku*, pp. 314-18; "Amida Hall," p. 33; "Fukiji Ōdō," in *Rekishi to Chiri* 歴史と地理, vi, Nov. 1920. Traditionally erected during the early 8th century, but universally admitted to be Heian in style. Remarkable chiefly for the paintings preserved on its interior, especially a Paradise scene on the wall behind the icon which recalls that of the Hōdōdō.

Murōji Kondō: cf. Fukuyama, "Tendai Shingon," pp. 73-4; Amanuma, *Zūroku*, pp. 195-201. Related texts in *Kōji-ruien*, *Shūkyōbu* iii, pp. 1320-1. The style of the images and wall paintings affords the best example of the so-called Jōgan, or Kōnin, or Early Heian manner, and adds verisimilitude to the temple tradition linking its erection and equipment to the Shingon founder, Kōbō-daishi. The small 5-storeyed pagoda is supposed to have been erected by him in a single night. On the other hand, Fukuyama points out that the tutelary spirit of the region, Ryūketsu-no-kami 龍穴神, was worshipped during the Nara period, and that a "Jingūji" 神宮寺—a temple under Buddhist auspices, erected in honor of a local Shintō divinity—was erected in the 770's or early 780's, by a priest from Kōfukuji, one Kenke 賢環 (705-93). He believes that the pagoda dates from this period, and owes its small scale to the special character of the establishment

These variations seem to have no great significance, but to depend in general on individual factors. The Jōrūji main hall has its extreme proportion because it houses an unusual deity, the Nine-bodied Amida, in the form of nine separate seated statues. Each occupies a bay of chancel space in length and two in depth, being large in relation to the scale of the building; by the lengthwise extension natural to Far Eastern architecture, the

as a Jōgūji; its details seem to him Nara rather than Heian (see below, pp. 197-8). The somewhat unusual character of the Kondō—e.g. the fact that although built on a stone platform in Nara style it has a wood floor laid on joists, in Heian style—he explains by a supposed alteration, during Heian, of a late 8th century original. The whole front of the building, providing a wide anteroom on the interior, is an addition of the Edo period.

Kōryūji Kōdō: texts relating to the temple quoted in *Kōji-ruien*, iii, pp. 812 ff. First established under the patronage of Prince Shōtoku in the early 7th century, as Hachiokadera 蜂岡寺 (for which see end of Appendix Ia). Perhaps moved to a new site when the capital was transferred to Kyōto. Two completely disastrous fires, in 818 and 1150; new buildings after the latter dedicated in 1165 (the dedication record has been preserved; cf. *Zoku-gunshoruijū*, xxvii/1, pp. 323 ff.).

The present lecture hall is clearly Heian in style; its main icons are three seated figures of wood, Amida flanked by Jizō and Kokūzō-bosatsu, all of which show the characteristics of the 9th century. There is no indication that the building escaped the fire of 1150; the temple history, *Kōryūji-raiyūki* 來由起 of 1499, says that at that time "the Buddha pavilions and priests' precincts" 佛閣僧院 were destroyed, which suggests a general conflagration (*D-n-bukkyō-zensho*, *Jishi-sōsho*, iii, pp. 78 ff., or *Kōji-ruien*, p. 817). Two temple inventories may be consulted, the later in the *Raiyūki* cited above, the earlier made in 890 to record re-erection after the first fire (*K-shizai-kōtai-jitsurokuchō* 資財校賛實錄帳, in *D-n-bukkyō-zensho* etc., pp. 54 ff.). Both lists record the three icons accurately as 9th century works; this with their style makes it certain that they escaped the second fire.

As to the lecture hall itself, the 1499 inventory says only "5 ken 4 men" 五間四面. The 890 list says: "One cypress-shingled 5 ken hall of the Exposition of the Law, with aisles on the four sides. 檜皮葺五間講法堂壹宇有庇肆面. Height 13 ft., length 80 ft., depth 44 ft."

"5 ken 4 men" in Heian and Kamakura meant a building whose chancel was 5 bays long, and which had an ambulatory on four sides. Both inventories correspond on this point. The existing building, however, has a chancel of 3 bays only, and in the same terminology would be described as "3 ken 4 men." Its dimensions (as checked off rather roughly by me) are: length, 54.65 shaku; depth, 43 shaku; (between column axes); height (of column) 14.5 shaku. Presuming that the 890 inventory was using the Tennyō foot still, its dimensions in terms of the modern shaku would become about 78 by 42.9 by 12.7. Two dimensions thus tally, while the length, like the number of bays, does not. Now it is obvious that the Kōdō underwent alterations in the Edo period; the corners of its front facade, for example, contain ornamental windows of a design which would have been impossible earlier. It may be assumed that at that time the building, being already in some disrepair, was cut down in length to suit the diminished needs of the age. Its present form even seems to show signs of such truncation. Across the front, the bays measure, on column axes, 10.9, 10.9, 11.1, 10.9, 10.9 shaku. Down the ends the measurements are: 10.2, 11.25, 10.2. For structural reasons, corner bays are almost always square; these are not, and as a result there is a certain awkwardness in the beam intersections at each corner. It seems clear that the building as erected in the 12th century had one more bay on each end, with a length of 10.2. This would have given it a normal bay proportioning (corner smallest, center largest), and a total length of 75.1. The latter figure would be close enough to the length recorded for the 9th century hall to make it probable that the re-erection of the mid 12th century was carried out on the original column bases (as it was to house the original icons). In plan the existing Kōdō, therefore, is a 12th century reproduction of the 9th century, truncated probably in the 17th.

Kami-daigo Yakushidō: cf. Ōoka, *op. cit.*, and Fukuyama, "Tendai Shingon," under Daigoji; Amanuma,

sanctuary thus becomes nine by two, and the ambulatory increases the whole building to eleven by four. The square buildings are so not because of any sense of radiation like that of Hōryūji—all are oriented as definitely toward the front as in the Nara period—but in almost every case clearly because of their small size. The majority of remains of the Heian period have survived because of their location in out-of-the-way places, withdrawn from the wars which have ravaged the capital districts; as a corollary, they are provincial or even rural in scale. Limited dimensions, again, are a product not only of places but also of use. Almost all surviving Heian monuments represent a class of minor monastic buildings devoted to the specialized worship of a single form of deity. Temple inventories of the time show that such halls even in the largest establishments of the metropolitan area were usually small, and often square in plan. The ceremonies which they accommodated must have been almost purely professional in character, since neither the dimensions nor the ground-plans of existing or recorded buildings of the type indicate any problem of a lay audience. The greater number of remains, dedicated to Amida, probably may be placed in the Heian category of Jōgyō-sammaidō, or “hall of *samādhi* (attained by) perpetual walking.” The first of the kind was set up by Jikaku-daishi in Enryakuji on Hieizan, around 851, after his return from China. The icon of the Jōgyō-sammaidō seems always to have been Amida, attended by a varying number of Bosatsu; the worship of that divinity standardized by Tendai had as its main feature a long, uninterrupted perambulation about

Shiyō, pp. 184-6; *Zūroku*, pp. 271-3. The original building was an erection of the early 10th century, under the patronage of the Emperor Daigo. By the 12th, this had fallen into extreme disrepair. In 1121/2 timber-cutting was begun for its successor; in 1121/4 the ridge-pole was raised; in 1121/11 the image of Yakushi which had been temporarily housed in a neighboring hall was brought back; and the dedication took place in 1124/4/2.

Jōruriji Hondō: cf. Ōoka under that temple; Amanuma, *Zūroku*, pp. 268-70; Hattori in *Kokuhō-kenzōbutsu*, ii/6; a history, *Jōruriji-ryūki* 流記事 printed in *D-n-bukk-zensho*, *Jishi-sōsho*, iii, pp. 166 ff.; other related texts in *Kōji-ruien*, iii, pp. 1094-95. A confusing situation. The existing temple goes back to a foundation by priest Gimyo 義明 in 1047, as a center for the study and performance of both esoteric and exoteric forms of worship. In early centuries it was linked with an eastern branch a short distance away; founded in 1013, apparently less successful than the western, and now vanished. The name “Jōruriji” refers to an original dedication to Yakushi, since it recalls the name of His Paradise (as Jōdōji, etc. does that of Amida). The original icon of Yakushi is supposedly enshrined at present in the temple’s three-storeyed pagoda, on the other side of a large, Heian-garden-type pool from the Hondō. The pagoda was moved there from Kyōto in 1178; but no text explains when and how the principal deity worshipped came to be the Nine-bodied Amida instead. The history refers frequently to a Hondō; but whether it means the present main hall, in twelfth century references, or a vanished Yakushi hall, is not clear. Temple tradition has it that Gimyo had the existing nine Amida images made by the famous contemporary sculptor Jōchō (cf. *Kōji-ruien*), known for his work at the Hōdō. Hattori accepts this and a consequent mid eleventh century date for the hall, on stylistic grounds; Ōoka demurs. The tradition, certainly, has all the earmarks of priestly fable; almost all mid Heian images are attributed to Jōchō, as all of earlier style in the Shingon sect are supposedly by Kōbō-daishi, and all archaic images by Prince Shōtoku. The history does state that in 1142 *sūtra* expositions devoted to Amida were first performed in the “Jōdōin” 淨土院; this is its only clear reference to a change in emphasis from Yakushi to Amida, and may date the establishment of the present Hondō on its present site (at the beginning of a period of prosperity, when many buildings were set up). It does not necessarily date the first erection of the existing building. The history makes a rather cryptic reference to a dismantling and removal of a Hondō to the “western edge of the hillside” in 1157 (from the eastern half, where it may have been in existence for some time?).

the image altar, accompanied by the constant repetition of His name.²⁶³ As no more than one specialized aspect of the broad eclecticism of Tendai, such ceremonies must commonly have been performed in any establishment by only a limited number of monks. The essential *pradakṣiṇa* made the basic architectural requirements the same as those of earlier periods, the chancel and the ambulatory (fig. 83). At the modest scale of a chapel, with the diminished icons typical of the period, the first of these might be no more than a single bay square; the addition of an aisle on four sides would bring the whole building to the three by three form seen in a large number of existing remains.

The conservatism in plan of existing Heian halls may thus be explained in the majority of cases by the ceremonies which they housed; based still on a perambulation of the *shumidan*, and limited by their special character to a congregation largely or even exclusively monastic. Without any share in the problem of the Heian main hall, to combine secrecy of worship with a large lay attendance, they took no part in its evolution; and so reproduced for centuries the formula of the Nara period, which was still sufficient for their purposes.

Two closely related tendencies seen in these plans nevertheless deserve notice, for the suggestions they give of a general trend of plan development: increase of the depth of the hall at the expense of its length, and increase in ambulatory area at the expense of the chancel.

The latter phenomenon appears in extreme form in the Amidadō of Hōkaiji (fig. 84). The main block of the building is five bays square, surrounded by a single bay porch with a penthouse roof. Within this block, the old ambulatory formula would have produced a chancel three bays square. Instead, the central area is a single bay each way, somewhat larger than those on the exterior. The aisle running all around is hence almost two bays wide; and with a complete reversal of Nara proportions, occupies the majority of the interior space.

A more conventional strategem to achieve something of the same effect is seen in the "golden" hall of Murōji, the Yakushi hall of Kami-daigo (fig. 85), and the main hall of Jōruriji. In these buildings, all four bays deep, the two middle column intervals—representing the depth of the chancel—are narrower than the two corner ones, representing the width of front and rear aisles. In the case of Jōruriji, the difference involved is about a foot. Here again is a reversal of Nara practise, and indeed of one of the normal characteristics of Far Eastern architecture in general, the corner bays elsewhere being definitely

²⁶³ Cf. Ōoka, *op. cit.*, at end on prevalence of halls for the worship of Amida by the practise of the *Jōgyō-sammai*. Erection of the first *Jōgyō-sammaidō* on Hieizan is attested by the temple record *Eigakuyōki*, i (Gunshoruiju, *Shakkabu*, p. 525); after which, in 851, "the ceremony of the *Nembutsu-sammai* (*samādhi* attained through invoking the name of the Buddha), as practised on Wu-t'ai-shan was begun." The original hall, in the eastern precincts of Enryakuji, was followed by one in the western in 893, and by one in the north-eastern, Yokawa 横川, in 968. The original, which set the standard, was according to the inventory of 859 a 5 *ken* hall, cypress-shingled, and crowned by a gold and silver finial; i.e. it must have been a square, 7 by 7 on the exterior. It was unusual in size, because it served the largest of Tendai monasteries; and perhaps for this reason it was furnished with a plan element beyond the conventional chancel-and-ambulatory, an extra aisle across the front called a *magobisashi* 孫庇 (see below, pp. 161-2). As Ōoka points out, the ambulatory was the one essential feature of this building type.

narrower than the rest. Its adoption, like the unusual arrangement at Hōkaiji, seems clearly due to the desire to free as much of the interior as possible, within the ambulatory formula, for human purposes of offering and worship.

A design unhampered by tradition or structural necessities would doubtless have concentrated the greater part of this human area in front of the chancel; as we shall see later, such an evolution actually took place in the Heian period in many buildings of less conventional form, now unhappily lost. For normal purposes of worship, the old *Mandara*-like conception of Hōryūji, the focus of general radiation and its circumference, must have been supplanted almost entirely at this time by the opposing secular tradition of front and rear, the Buddha, like the Emperor, facing south, and his adorers like courtiers before him. Not only must it have seemed preferable for priests and laity to congregate in front of their icons, rather than beside them or behind, but the new elaboration of altar furniture brought into Japan by the esoteric sects was also normally concentrated at the front, and made an increased demand on the space available at the south of the chancel. We shall study below other and freer solutions of this problem, as they are indicated by Heian texts.²⁶⁴ Within the conventional ambulatory scheme, however, any increase made for especial convenience in the width of the front aisle, had also necessarily to be made on the ends and rear, where additional space was not needed; and except by such a tour de force of construction as that seen at Hōkaiji, the amount which could be gained by such juggling with dimensions was extremely limited. The dilemma is clearly visible at Jōruriji even today. In spite of the increase in aisle width—greater than necessary on ends and rear—the front is still too narrow for convenience. The central Amida, larger than the rest, is honored by the use of typical esoteric altar furniture in front of Him, offering table, ritual altar, and dais. The whole unit stands in the front aisle, on the axis, and occupies so much of the aisle's width that only a few feet are left between the dais and the door, making the passage of a procession at least inconvenient.

The second tendency, to increase the depth of the whole building at the expense of its length, is probably related to the same secular tradition of hieratic ranking from front to rear. The two examples of this type, the main halls of Sanzenin and Fukiji, are both three by four, with a chancel area therefore one by two. I have not seen the latter building, but in the former this new proportion of chancel seems to depend directly on the arrangement of its icons. These are Amida and His attendant Bosatsu, Kannon and Seishi; instead of all being strung out in line, as in the Nara period, the two subordinate figures are placed in front. The immediate inspiration for such iconography is probably the idea of the *raikō* 來迎, the welcome accorded by Amida to His Paradise, and His arrival at the death-bed of His worshipper, preceded by His attendants. The impression thus given is one of movement toward the observer. At the same time, the relative positions of the figures are based on secular ideas of gradation of rank, as in a court procession.

The plan of the Hōōdō or "phoenix hall" is unusual within its central block as well as in its combination of block and wings. The core is a building three by two surrounded by a *mokoshi* penthouse under the main eaves, a single bay wide. Instead of running all the way around as an open porch, as at Hōkaiji, this penthouse is open on front and ends,

²⁶⁴ See below, pp. 161 ff.

but closed on the rear; and there is included with the interior. From one point of view, such treatment is a variant of that already seen in the "golden" hall of Tōshōdaiji, where the "ambulatory" is a porch on the front, and a closed aisle on the other three sides. In the Hōōdō its use seems clearly a product of interior spatial necessities. The core being only two bays deep, the altar platform is set against its rear wall; without the addition of the enclosed penthouse, it would be impossible to go behind the image without going out-of-doors. As I have already said, in the later development of Japanese Buddhism changes of ritual came to do away with any necessity for going behind the icon, so that its altar could be placed frankly against the rear wall of the hall. I know of no evidence that this stage had been reached in the Heian period, however, even in the new types of Shingon worship in which it is later typical. Tendai worship of the Amida enthroned in the "phoenix hall" must certainly have included the normal *pradakṣiṇa*.

The cross-sections of extant Heian icon halls seem, on first acquaintance, no further advanced beyond Nara than their ground-plans. Their typical combinations of chancel and ambulatory produce interior "rooms" which apparently vary from those of earlier centuries only in decorative details. The ceilings over both spaces may be open, with exposed rafters, or closed, with coffered and coved ceilings, in either case suggesting earlier prototypes. A simple example of the former is the main hall of Jōruriji (fig. 87). No beams cross the aisles, which are closed above by the undersides of the rafters alone. The chancel, except above the central image, is spanned by a single beam per bay; from each of these, two "arms" run up diagonally to meet under the ridge-pole, which they support through a bearing-block and "boat" bracket. In appearance this is only a slightly simpler, version, on a smaller scale, of the embryonic truss design used in the Nara period at Shinyakushiji.

The more elaborate open ceiling of the Kōryūji lecture hall, again, seems merely a modification of the characteristic Nara double-tiered beam-and-*kaerumata* formula, which we have seen in the Hōryūji Dēmpōdō and *sūtra* repository, and in buildings of every period in China and Korea (figs. 86, 108). The coved and coffered ceiling of the Hōōdō, crossed by large girders and held around its cornice by complicated bracketing, is a lineal descendant of these of the Hokkedō and the Kondō of Tōshōdaiji (figs. 105, 26). The sole unprecedented ceiling treatment among remains of the period is that of the main hall of Sanzenin, made of planks following a shape like that of an overturned boat. This is an obvious anomaly, and because of its small size involves no particular problems.

A closer examination of the buildings themselves shows that their apparent conservatism is by no means the only factor in the Heian cross-section, or even the most important. The problem is complicated, even further than in Nara, by the fact that not one has retained its original roof construction, the change in many cases being extreme. In a number of instances, however, elements integral to the original buildings, or almost impossible to imagine as the result of later reconstruction, reveal enough to show that the typical roof-section of Heian must already have been fundamentally different from that of Nara; i. e. that it was already the double roof characteristic of all later Japanese practise, rather than the single shell of Chinese tradition.

Thus the Kōryūji lecture hall, alongside the conservatism of its open chancel ceiling, shows a novel feature in the sharp break in slope between its aisle and chancel rafters.

If the roof had ever rested directly on these, in Chinese fashion, it would have been hard to avoid a corresponding ugly break in the exterior silhouette, in place of the proper gradual curve. In addition, the Kōryūji aisle rafters, like those of other Heian halls, are abnormally low in slope, around 13 degrees; the Chinese standard is usually well over 20 (figs. 86, 30). Here again it is hard to imagine that the exterior tiles ever followed the same low angle, with such disregard of drainage efficiency in a land of heavy rain and snow. The reasonable conclusion is that the exterior roof slope at Kōryūji never followed the lines of the visible rafters below, but was built out by additional framing to form an independent outer shell.

The interior of Jōruriji, for all its apparent repetition of the Shinyakushiji scheme, discloses the new principle even more obviously (fig. 87). Eight of the nine chancel bays are covered by an open-beam-and-rafter ceiling at the same level—which in earlier practise would have been approximately that of the roof outside. The central bay, however, is raised several feet higher to give special honor to the middle Amida, and is provided with slightly more elaborate details. Strict Chinese roofing practise would have made this bay project above the rest as a sort of skylight on the exterior, as is the case in the Lama temple in Peking (fig. 98). In actuality, nothing shows, and it is impossible to imagine that such an excrescence ever broke the long, smooth lines of the Japanese roof. A double-shell roof is again the only possible explanation.

An equally obvious indication of fundamental change in design is afforded by the cross-section of the Yakushidō of Kamidaigo (fig. 85). Here the aisle is covered by exposed rafters, and the chancel by a coffered ceiling. The latter, instead of running across at the level of the top of the aisle, is several feet above. The break could be accommodated within the orthodox Chinese tradition only by the device of double eaves, one over the aisles and the main roof over the chancel. It is theoretically possible that the original Yakushi hall had this two-storeyed form, and was converted to its present appearance later; but the building is far too small for such monumental treatment, and it is more reasonable to believe that from the first the break was concealed by a double roof. With slightly different details the same design appears in the Amida hall of Kōzōji.

Japanese architects trace the origin of the double roof peculiar to their national style, to a desire for a steeper slope giving increased protection against the heavy rainfall of Japan. We shall see below that its use from the Heian period on, went far beyond this original utilitarian purpose, in contributing to the evolution of the hall of worship. In the Chinese formula adopted with Buddhism in the Asuka period and gradually discarded after Nara, plan and section are integral and indissoluble elements of one compact organism. A given ground-plan inevitably determines a cross-section fixed except in minor details, and with the same minor exceptions determines the elevation as well. The structural framework erected upon it is basically the same, whether visible in its entirety, as in the case of the Hai-hui-tien at Ta-t'ung-fu, or hidden by a ceiling as in that of the Kuan-yin-ko in Tulo-ssü. The roof is an outer shell only, following the framework beneath with no more disguise than that given by flesh and skin to the human head. In the developed Japanese style whose beginnings are visible in the Heian period, the roof is like a hat, beneath which there may be anything of the same approximate size. The wide interval between inner and outer shells, hardly less pronounced in fully-developed construction than that between

the stone voussoirs of a Gothic vault and the lead of the wooden roof above it, permits the disguise on the exterior of almost anything undertaken inside.

Chinese architecture is almost always basically symmetrical about both axes; naturally so in its east and west halves, but with hardly less inevitability and emphasis in front and rear also. Even when the roof framing is hidden by a ceiling, the sense of its form and the obligations it imposes remain. The roof framing itself is symmetrical; the ground plan beneath must follow, or avoid the balance only by an obvious effort. The classical plan of Nara, the open interior area and the ambulatory around it, may be varied as we have seen it was under the Liao and Chin, achieving greater spaciousness in front by the shifting or removal of columns;²⁶⁵ the focus of attention, altar or throne, may be moved from the center to the rear; the basic sense of symmetry remains, and is restored to full force in the beams and supports of the roof construction. In the final hardening of Chinese architecture in the Ch'ing palace style, even the minor variations of earlier centuries are abandoned, and the typical hall is almost completely symmetrical front and rear as well as east and west.

The mature double roof of Japan imposes on the building beneath it no other obligations than a limit of total area and a maximum of possible beam span. Its construction, being entirely invisible, may take any form which is convenient to the individual case, symmetrical or otherwise. Being invisible and merely expedient, it has nothing to do with the rooms which it covers, requiring of them merely a number of points of support which may be placed almost anywhere within the bounds of structural possibility. The system thus encourages a freedom of planning for the necessities of actual use, which is in the strongest possible contrast to the rigid laws governing monumental architecture in China. We shall find that from the Heian period on, this freedom was taken advantage of by Japanese architects to develop temple ground-plans and cross-sections of remarkable complication, effecting a complete transformation of the fundamentals of architectural style. Between the earliest remaining temple hall in China and the latest Ch'ing palace, the differences are only those of minor shapes and proportions. Between the Kondō of Hōryūji and a well developed temple hall even of Kamakura—like that of Saimyōji already studied—the differences are enormous. It is not too much to say that the contrast was made possible chiefly by the differing systems of roof construction used in the two countries.

It seems to me probable that the double-shell roof, like so much else, was first suggested to the Japanese by use in China, although their adaptation of it (as so often) went far beyond the practise of the continent. There is evidence that the form has long existed in China as a sort of heterodox variation, practised with timidity and limited (to the best of my knowledge) to the south. Its first appearance is in the gateways of the Nara period, certainly Chinese in inspiration, the Tōdaiinon of Hōryūji and the Tengaimon of Tōdaiji (fig. 36), in which front and rear halves are covered by an "open ceiling" above each, while the whole is concealed by a single gable. I have found it again in a late Ming manual of gardens and garden architecture, the *Yüan Chih* 園治, written by a native of Kiangsu, Chi Ch'eng 計成.²⁶⁶ This work illustrates several building types in cross-section. Some have the single-shell, symmetrical framework of orthodox tradition. In others, a fore-

²⁶⁵ See above, p. 86.

²⁶⁶ Reprinted in Peking, 1932, by the Society for Research in Chinese Architecture, 中國營造學社.

hall and the main chamber behind are each closed in by "open roofs" (with the curved outline of late Chinese style), while the whole lies under one exterior roof (fig. 37). What is certainly the same principle appears in seventeenth and eighteenth century temples in the port of Nagasaki, erected by emigrants from the south China coast (fig. 117).²⁶⁷ In all examples of such complex planning which I know in north China, the fore-hall has its own small roof, identical inside and out, intersecting the main one (figs. 98, 100).²⁶⁸ Chi Ch'êng in commenting briefly on his illustrations calls the double-shell design a "rough framing type" 草架式 (doubtless because part of the construction is invisible, and so need not be carefully worked). He commends it as an indispensable part of the architect's repertory, to be preferred for practical reasons to the alternative scheme. "When a fore-hall, *chüan*, is added to the main block, the use of (parallel roofs with a) valley between is costly and impermanent; so rough framing should be used to regularize inside and outside" 凡屋添卷用天溝且費事不耐久故以草架表裡整齊. It involves the use of what he calls "extra rafters" 重椽, which make "a simulated roof within the roof" 屋中假屋也. The idea and its practical justification are clearly similar to the Japanese, whether or not any historical parenthood can be proved. At the same time, the similarity in principle is balanced by clear differences in application. So far as I can judge from available evidence, the south Chinese "rough framing" is much more strictly limited than the Japanese. The concealing outer shell covers only a single plan variation—the addition of some sort of fore-hall to the main block—and is still closely related to the "open roofs" seen inside. The construction inside and out makes use of the same beams and posts; even the same rafters, unless the interior gable is curved; and the exterior roof merely runs up a certain distance beyond the apex seen on the interior. Mature Japanese practise goes far beyond those limits, to create an almost complete independence of exterior and interior. It is this much greater freedom and boldness, incidentally, which makes the roofs of the Nagasaki temples unlike those illustrated in the *Yüan Chih*; they represent a compromise between two ways of building, rather than pure south Chinese tradition.

From the point of view of a purist, the advantages gained in free planning by the Japanese double-shell roof are perhaps offset by the insincerity of design it has fostered. In the first centuries of their borrowed Buddhist architecture, the Japanese acquired strongly fixed ideas of the proper appearance of a temple interior, many of which they retained throughout the rest of their history. In origin those ideas were based on orthodox Chinese methods of construction, which they expressed with perfect directness and simplicity. The later substitution of a wholly new, invisible framing left them as forms which still appeared to be structural, but actually were almost entirely decorative. The most striking instance of the change is given by the "open roof"; in orthodox Chinese practise the natural expression of the roof framing itself, with every beam, post, purlin and rafter a structural element doing the work assigned to it in the design. In the open ceilings of the Heian period, as for example in the lecture hall of Kōryūji, the perfect fusion of actual and visible function is already upset (figs. 86, 108). The rafters visible from the interior, instead of supporting a heavy layer of earth and tiles, are merely a means of space en-

²⁶⁷ See below, p. 288.

²⁶⁸ See below, pp. 172, 179 ff.

closure, like any decorative flat ceiling. In the present double roof framing of the hall, which I believe must correspond at least in part to the original, the balance of function between the purlins has been destroyed. The purlins over the columns and the ridge-pole are major lines of support for the hidden timber-work; the purlins between these hold only the middle of the rafters, which in their turn hold nothing. The whole beam system, in its two tiers with *ita-kaerumata* between, is designed to meet a load distributed more or less evenly on the five purlin lines, and its visual duty is to emphasize this even distribution as strongly as possible. When three of the five lines take the whole weight and the other two nothing at all, the meaning of the system is already half lost. Japanese architects, as we shall see, went far beyond even this stage, transforming the basic spatial idea of the "open roof." In origin, and throughout its course on the continent, the latter signifies the building itself, seen from the interior in its most important structural function of supporting the shell of the roof. In well-developed Japanese temple halls, the "open roof"—beams, *kaerumata*, purlins, rafters, and all—becomes merely a means of enclosing a single room, of no more structural significance than any other ceiling type. It need no longer correspond even approximately to the exterior roof far above it; it may lie beneath the actual, hidden ridge-pole or not, as the exigencies of the ground-plan make most convenient; it may be duplicated by another room of the same sort, so that from the Chinese point of view the interior effect is of two independent buildings side by side; or it may be set in combination with rooms covered by flat ceilings, merely by the whim of the architect.

Parallels for this sort of genial "dishonesty" are of course not hard to find in the architectural history of the world. The Romans made a like use of the Greek orders to lend a traditional dignity and beauty to their feats of engineering; in the twentieth century, American designers with no more compunction place beamed or vaulted Gothic halls inside the steel frame of a skyscraper. A prime factor in the phenomenon is obviously the development of superior methods of construction, which render unnecessary the traditional forms still prized for their visual effect. This factor was operative in Japan as well, although the contrast between old and new was far less marked there than in Rome or the modern world. The mature Japanese roof is superior to the Chinese in flexibility of design and potential span, and bolder in the width of its overhang. It is a pity that such structural efficiency has so often been obscured by pretense. In Chinese architecture as well, traditional forms were preserved for centuries after their original function had been lost. The Ch'ing official palace style, repeated everywhere in and around Peking, is full of such survivals: gilded door-knobs in which the "handle" has become a flat strip fixed on the door surface and impossible to grasp; gateway motives which consist of a whole small building facade, set against a higher wall; and always the bracketing, degenerated in its final phase into a mere decorative cornice. In all of these witnesses to an organic process of growth and decay, however, the ultimate stage of pure ornament is frankly expressed. The door-knobs deceive no one; the bracketing, dwarfed and vestigial, makes no pretense of supporting anything. To the uncompromising theorist, it is perhaps the gravest defect of Japanese architecture—as of that of modern America—that the natural evolution of its forms has been held back to so great an extent by conservative tradition. One large class of Japanese temple buildings, which we shall find well represented from late Heian

on, is as frank in its separation of the functional and the ornamental as the Ch'ing style; the interior spaces are enclosed by forms—open latticing, delicately panelled and reticulated coved ceilings—which are obviously no more than a shell concealing the timbers of the actual framework. In another class, equally large, ingenuity and material have been expended for centuries toward the deliberate obfuscation of the observer. The visible portion of such halls is sturdily built, with timbers of good size which seem to work together to support the general load. Some of them perhaps do play a part in the real framing; others of the same size perhaps hold nothing at all; it is almost impossible to tell, without taking the building apart.

The original framework of the Heian double roof, since every remaining example has been obviously rebuilt at least once and perhaps many times, must be reconstructed from fragmentary evidence. The majority of Heian remains today contain the *hanegi*, the long slanting cantilever which runs out to the edge of the eaves, and balances the latter's weight by the thrusts of the interior. This member is considered by Japanese students of architecture to be a comparatively late development, appearing perhaps from the Momoyama period. It occurs most typically with a roof of the steep slope common in later Japanese architecture; added in restoration to ancient buildings, it probably has resulted in an increase of their roof slope to a greater or less degree. Evidence of this change is fairly clear in Heian remains, and as in earlier centuries is unmistakable in the pagoda. In that of Daigoji, built in the mid tenth century,²⁶⁹ the four lower roofs have a common gradual slope, which must have been approximately that of the original design; they contain no *hanegi*. The latter appears only in the top roof, where it could be readily introduced in the course of repairs, without any of the complicated adjustment to existing beams and pillars necessary below; the slope of the top roof is markedly steeper than that of the rest. As already mentioned, the evidence of the miniature pagodas of Kairyūji and Gokurakuin goes to show that the early pagoda type, unmarked by later restoration, used approximately the same very gradual slope in all its roofs (fig. 62). A further sign of increase in roof angle through the introduction of the *hanegi* in later repairs is apparent in the Hōōdō. Here the probably latest stage of double *hanegi* is found, giving the maximum of support to the wide overhanging eaves. The original roof slope seems to have been changed by their use; for on the ends of the building, the gable fields contain brackets supporting the purlins, of which the lower portion is today hidden by the tiling running up against them. It seems unquestionable that these details, visible today only in drawings of the construction of the hall, were once meant to be seen as part of a pseudo-functional decorative system, and were later covered, with the whole lower part of the gable field, by an increase in the slope of the roof.

The lower eaves of the Murōji and Daigoji pagodas probably retain their original framing system, although the slope of the tiling may have been shifted to some slight degree. In the pagoda of Yakushiji, any increase of the original roof slope would be im-

²⁶⁹ For documentary evidence of the erection of the Daigoji pagoda, cf. Fukuyama, "Tendai Shingon," pp. 65-6. According to the *Rihōōki* 李部王記 (a court chronicle between 877 and 926, by the Imperial Prince Shigeakira 重明), the pagoda was modelled on that of Fukōji 普光寺 (whereabouts not certain). Work was completed by 951, and dedication took place in 952/12/2.

possible without hiding the brackets of the balcony above; raising the balcony to avoid a steeper roof would here entail raising the whole intermediate *mokoshi* level, with its own minor eaves; and in addition the balcony is tied firmly to the construction of the whole pagoda by the small beams which run from its edge back into the interior framing. At Murōji and Daigoji, the "balconies" are railings only, without brackets below or a floor, and without any transverse connection to the framework of the pagoda core; they rest actually on the roofs, and could theoretically be moved up and down with them without affecting the general design. In both these pagodas, the lower roofs have a fairly gradual slope, however, and it is probable that they have not changed greatly since their first construction. The double shell in their case is simply achieved. Short posts stand on the visible rafters, supporting horizontal lines of what might be called minor purlins; these hold a sheathing on which the tiles rest, with a small interval of mud plaster. In the Daigoji pagoda the raise in roof slope thus achieved makes a space perhaps two feet high, on the line of the "balcony" railing, between tiles and rafters.

Such simple framing probably was applicable only to roofs of small scale, comparable to pagoda eaves. Among existing Heian remains, the new structural system must have been most severely tried in the Amida hall of Hōkaiji. This building is a marked exception to the general principle of imitation of Chinese structural forms long after their meaning had disappeared. Its cross-section (fig. 84) is entirely unlike that of any Chinese hall known to me. Except for those tying together the four pillars of the chancel, there are no visible transverse beams. Chancel and exterior columns stand on different axes, and are joined only by the floor below and the rafters above. In contrast to the massiveness and close interlocking of a typical Chinese section, this has an extraordinary lightness and looseness of feeling. The difference is in part that appropriate to a difference in roofing materials, the Chinese typically tile with a thick basis of earth, the Amidadō the much lighter Japanese cypress shingles (fig. 96). Even this difference in load fails to justify so complete an airy negligence in visible framing. The system of the pagodas, short posts standing on the rafters to support the upper and outer roof shell, might possibly succeed at Hōkaiji if the rafters had merely to support the dead weight of cypress shingles; but Japan is a land of earthquakes and typhoons, and for all such violent lateral thrusts rafters as the sole tie between the exterior and interior supports of a large building can never have been really adequate. The invisible roof construction of the Amidadō, then, must have had from the start something like its present form, in which the aisle is spanned, above the rafters, by regularly spaced slanting beams of appropriately sturdy size. The existing roof contains also *hanegi* running out to the end of the eaves, and a further system of diagonal bracing which perhaps was not in the original. The latter probably consisted of beams called *hari* 梁, running at a slant parallel to the rafters across the aisles, and a series of posts rising from these, as in the pagoda eaves, to support the outer shell of shingles. Above the chancel, the present roof contains a sort of invisible reminiscence of Chinese practice; posts standing on the top of the four chancel columns support a horizontal square of beam framework where they run against the outer shell; and from this square minor struts rise to hold the apex of the pyramid.

The existing roof of the lecture hall of Kōryūji also contains *hari* parallel to the

rafters, and while these are certainly modern their distant ancestors were perhaps present in the original building. As already noted, their effect here on the pseudo-structural system of beams and purlins below is to alter radically the apparent balance of function among them. The invisible *hari* spans the interval between columns and visible ridge-pole, and through the struts upon it takes the entire weight of that section of the roof. For the visible purlins between, nothing is left to support but the middle of purely ornamental rafters.

THE EVOLUTION OF A PURELY JAPANESE ICON HALL:

For the chief architectural problem posed by esoteric Buddhism—the necessity of combining secrecy of ritual with a potentially large lay attendance—the Heian period seems to have developed three separate solutions, attested by written records of the time. The simplest involved the addition of an extra aisle across the front, outside the ambulatory, covered by a prolongation of the main roof. The second was the provision of a building some distance in front of the hall proper, either entirely isolated or joined to it by some sort of gallery, which could accommodate all not directly participating in the ceremonies. The third—derived probably from the second—was the erection of a building for public attendance directly in front of the main hall, and separated from it only by a partition.

As we shall see in more detailed discussion later, it is a question whether any of these solutions was a creation of the Heian period. Combinations analogous to the second had certainly been used in Nara, for a special design of the refectory unit in several monasteries, and at least once elsewhere in the Tōindō complex of Yakushiji.²⁷⁰ The extra front aisle may perhaps also be carried back to Nara, since it appears in the existing column-bases of the lecture hall of Tōdaiji. It seems in direct opposition to the structural symmetry normal to Chinese practise, however; and thus at Tōdaiji may be due instead to an addition (with imitative column-bases) made in the rebuilding of the lecture hall in 935.²⁷¹ The last method may possibly be traceable to a Nara antecedent in the minor precincts of Saidaiji. It is certain, however, that all three were used far more extensively in Heian, with the stimulus of esoteric practise, than in any more or less hypothetical prototypes of an earlier age. Their subsequent history has reflected their varying degrees of success in solving the plan problem. The extra aisle, added in front of a normal chancel-and-ambulatory hall, has one obvious drawback. The wider it is, the farther the roof over it must descend below the general eaves line, dwarfing the main entrance and reversing facade relationships so that the front is the least impressive of the four. The isolated or semi-detached building is at the mercy of inclement weather. Both of these solutions, inescapably

²⁷⁰ See above, p. 78.

²⁷¹ This is a problem on which I should not dare to make anything more than a guess. The extra front aisle appears also in the so-called *Tōdaiji-sashizū* drawing, which Amanuma believes to have been copied from an 8th century original. Questioning its date with reference to the lecture hall would throw doubt on the plan of the refectory, at present entirely disappeared, and capable of reconstruction only through the drawing. If the *magobisashi* front aisle of the Kōdō was added in 935, the original drawing would have to have been of the Heian period, and the elaborate refectory complex might be a part of the same re-building. See above, note 128).

makeshift in character, seem to have died out in Kamakura, unable to compete with the practical convenience of the third. The last was the ancestor of the mature Kamakura design typified by Saimyōji, and formed the standard for almost all later temple planning.

A search for architectural evidence in Heian and Kamakura literature must be prefaced by an understanding of the terminology involved. The extra aisle was called *magobisashi* 孫廂, i.e. the "grandson" of the normal *hisashi* aisle: a purely Japanese expression, taken probably from domestic building practise. The building in front of the main hall received in early centuries a variety of names. Nara examples were called *saiden*, "narrow hall" (in the refectory complex of Hōryūji); *zenden*, "forehall" (in that of Kōfukuji); and *saiden* or *zensaisha*, "front narrow shelter" (in the Yakushiji Tōindō). Early Heian versions were equally varied in nomenclature, as will be seen below. Eventually both this solution and its derivative, the attached forehall, came to be indicated by the term *raidō* 禮堂, "hall for worship." This word furnishes the first key to plan development during the Heian period, indicating a space for public worship contrasted with that used for more or less secret ritual, and so proving an advance beyond the ground-plan conventions of Nara. It seems to have been not used before the ninth century, and therefore must stand as a product of the new forms of Buddhism it served. Unfortunately it was applied with such catholicity that its precise meaning in any description—whether an attached or isolated building, as in Kamakura a room at the front of the main hall, or even an open front porch—can be made clear only by additional evidence, which in the majority of texts is not furnished.

In modern Japanese, the size of a monumental building, in terms not of actual dimensions but of pillar intervals, is expressed by the use of the two terms *ken* 間 and *men* 面. The former refers to bays across the front, the latter to bays in the transverse sense across the ends. A building described as "five *ken* four *men*" is thus one five bays long by four deep. Nara descriptions typically give the outside dimensions of the building; Chinese texts give the same, or a statement of the number of longitudinal and transverse bays which is equivalent to the modern Japanese system. In Heian records the same terminology is used with a quite different meaning, based on the traditional practises of Japanese domestic architecture. The ancient Japanese dwelling was conceived of not as a plan unit in itself, but as a combination; a central area, the *moya*, 母屋 partially or completely enclosed by "aisles," *hisashi*. The viewpoint was perfectly logical, since the *moya* with its surrounding posts might exist alone; if a *hisashi* were added on one or more sides, its roof was frequently of a more gradual slope or even of a different material. This conception was adopted for Buddhist architecture as well during the Heian period, doubtless as part of a broad process of naturalization of imported systems. The standard Heian method of description uses the same two words *ken* and *men*. The former, however, now denotes not the number of bays across the whole facade, but those in the east-to-west dimension of the chancel—the central area corresponding to the *moya* of the dwelling house. *Men* refers not to bays at all, but in the literal sense of the word as "face," to the number of sides of the chancel which are enclosed by an aisle. Thus the phrase "five *ken* four *men*" describes a hall whose central area is five bays long, and which is surrounded by an aisle on all four sides. The depth of the chancel is not stated, being presumably more or less

standard with relation to the length. Aisles, *hisashi*, are mentioned merely with reference to the number of sides they occupy, because their length is fixed by that of the central area, and their width is presumably a single bay.

The most interesting account of an attempt to solve the needs of esoteric practise by the addition of a *magobisashi* aisle outside the conventional ambulatory, is furnished by the early history of the main hall of Enryakuji, the Tendai headquarters on Mt. Hiei. The origin of this famous building is not clearly known. What may have been its first form is listed (still partly in Nara terminology) in a monastery inventory of 859: "One five *ken*, cypress-shingled main hall of Yakushi, 30 by 15.5 *shaku*, 12 *shaku* high."²⁷² Several accounts state that during the abbotship of Chishō-daishi 智證大師, between 882 and 887, the hall was enlarged to a nine *ken* four *men* form (i. e. eleven bays long, with a complete ambulatory), to include under one roof the functions of two other buildings, the hall of Monju and the *sūtra* repository. At any rate, the Komponchūdō was burned down in 935, and was rebuilt by 940, apparently on the lines of its predecessor, in the old chancel-and-ambulatory formula. Whether a hall of that design was suited to the needs of Tendai services at the mid tenth century or not, a generation later its inconvenience was admitted, and was remedied by an enlargement of the area at the front. The prayer offered at the dedication of the altered main hall in 980 explains the circumstances, in language at times almost incomprehensibly elegant but clear enough in the main:²⁷³

"One who considered carefully the form of this main hall would have feared that it would not as yet have satisfied the heart of the Master (its founder, Dengyō-daishi). There were no corridors flanking it, and in front there was (only) a narrow aisle passage. On the nights when clergy and laity assembled, the 'clouds gathered and trampled on their shoulders'; at the times when far and near performed religious practises, the 'mists piled up and sat upon their heads.' (An unhappy time was this, under) the mountain rains and the dews of night in the springtime, (amid) the snows of the peak and the chill confusion at dawn, when the awesome doorways were obscured and one wandered astray, when the cavernous gateway was hidden and one's mind was troubled by vexation. Because of this a corridor passageway was built, joining on to the hall; and a wide *hisashi* aisle was constructed, (with a corresponding) extension of the stone gutter (surrounding the building). The dove-colored throng (now) might soar and move about without obstacle; the flocking pigeons had a place where they might go and rest. . . ."

The corridor passageway referred to above was probably the ancestor of that used with the present Edo period Komponchūdō, enclosing a small rectangular cloister area in front of the hall, and pierced at the center by a gateway. The "wide *hisashi*" was undoubtedly an extra outer aisle added across the front; a variant record of the alterations, contained in the *Tendai-zasu-no-ki* 天台座主記 of 1287, uses instead the technical term *magobisashi*.²⁷⁴ The effect of such an element in actual use may be seen on Hieizan today

²⁷² Cf. Fukuyama, "Tendai Shingon," pp. 15, 18.

²⁷³ The *Chūdō-gammon*, *Zoku-gunshoruijū*, xxviii/1, pp. 479-80, 倭見此中堂之體恐未飽大師之心傍無廻廊前有狹底道俗會合之夕雲集而履肩遠近修練之時霧重而席首况平山雨夜霧之春嶺雪寒亂之曉迷巖戶而亂步隱洞門而惱懷因之造步廊而連堂構廣廂而增砌鴿色之輩翔動無障鳩集之家去留有處。

²⁷⁴ *Zoku-gunshoruijū*, iv/2, p. 580 (on title holders 補任).

in the northernmost of its great halls of worship, the Yokawa-chūdō 横川中堂, where *magobisashi* exist across both front and rear; this is an Edo building, but may well retain vestiges in its ground plan of an ancestor planned in imitation of the Komponchūdō. The dedicatory prayer clearly explains the need for such an addition, to accomodate worshipers who under previous conditions had been forced to remain out-of-doors because of the narrowness of the southern aisle (fig. 88).

The *magobisashi* had been in use on Hieizan long before this, for an Enryakuji inventory of 859 records its presence in the hall of *samādhi* attained by perpetual walking, Jōgyō-sammaidō, erected by Jikaku-daishi around 851.²⁶³ The device was popular during the Heian period, particularly in small buildings of semi-domestic type with whose general absence of monumentality it harmonized. It bore no relation to the advance, accomplished in other buildings, toward a more sophisticated design; and with the perfection of a more successful solution in Kamakura, seems to have fallen into disuse. The Yokawa-chūdō, reproducing features of a Heian ground-plan, is the only instance known to me of its existence in large-scale Buddhist architecture today.

The completely isolated building for public worship is represented among remaining monuments by one Kamakura example: a *raidō* erected in the Eastern Precinct of Hōryūji on the site of the old middle gate, to serve the octagonal Yumedono a short distance to the north.²⁷⁵ Monastery records attest its existence throughout the Heian period. The number of references sufficiently explicit to permit identification of the type are few, and none is entirely clear; the sum of all evidence, however, permits no doubt that this device was in frequent use until the very end of the era.

Of all three solutions of the plan problem posed by esoteric Buddhism, the *raidō* standing at some distance in front of the main hall is most certainly linked to architectural practise of the Nara period. The Heian version, as I have said, had antecedents not only in Buddhist monasteries of Nara, but in Shintō as well. The basic problem of Shintō worship—disregarding all differences of magnitude and ritual method—was the same as that of Tendai and Shingon: a secret, closed sanctuary, necessitating provision for lay attendance outside its boundaries. Nara records indicate that the solution then in official use was the one visible in the great majority of shrines today, a building called the Haiden, sometimes enclosed by walls and sometimes entirely open, standing in front of the Honden 本殿 sanctuary, either in complete isolation or with a roofed gallery between the two²⁷⁶ (fig. 44). Haiden and *raidō* have the same meaning of "hall of worship," and closely similar functions; one sense of the word *raidō* undoubtedly indicated from the start an almost identical architectural form. The comparison was still obvious in the eighteenth

²⁶³ The *Tōin-engi* states that a *raidō* was one of the buildings restored with the Tōin in general in 859 (*D-n-bukkyō-zensho, Jishi-sōsho*, 1, p. 27). This is a later work, however, being compiled in 1736 from older documents which the editor admits were full of missing characters and mistakes, and which he attempted to rectify (*do.*, p. 31). The position of the building makes it probable that it was originally designed as a gateway, and became a *raidō* only when generations of familiarity with the latter's use had made it almost indispensable. For the existing Kamakura building, there is a record that its ridge-pole was raised in 1231 (cf. *Hōryūji no Kenchiku*, a publication by the monastery in 1937, p. 95).

²⁷⁶ See above, p. 79 and note 131.

century to the author of the glossary *Ruijumeibukkō* 類聚名物考, whose definition of *raidō* is "(something) like what is called Haiden at the present time."²⁷⁷

One of the earliest Heian buildings for public worship actually bore both names at different periods. This was a part of the Okunoin 奥院 of Kōyasan, the tomb precinct of the founder of Shingon, Kōbō-daishi; the buildings of which were brought to completion between 834 and 889. In a history of the tomb written in 1225, the *Kōyasan-okunoin-kōhaiki* 高野山奥院興廢記, the apposite section opens:

"With regard to the Haiden and living quarters of the Okunoin:

"The record of 'Bishop' (Sōjō) Ninkai of Ono (955-1046) says: 'There are the place of the Master's entering Nirvāṇa, the august hall, the *raidō*, and the living quarters. The priests of the mountain retreat go and come unceasingly to offer their protection.'

"Explanation: 'the place of entering Nirvāṇa' means the tomb pagoda of former times. The 'august hall' means the hall of Amida, etc. The '*raidō*' is the old Haiden. The 'living quarters' are the lodgings of the priests of the mountain retreat."

Various stages of the architectural history of the Haiden-*raidō* are recorded up to the Kamakura period. The original form is not described, and was destroyed in a fire of 952. Thereafter the precinct lay only partially restored until 1023, when as a result of a visit from the great Regent Fujiwara no Michinaga, "construction was begun of a three *ken* three *men* august Haiden and bridge building 橋殿."²⁷⁸ The latter term may mean merely a covered bridge across the small stream which runs through the compound. On the other hand, it perhaps refers to a covered gallery, some distance above the ground, leading from the Haiden to the tomb sanctuary (which at that time was no longer a small tomb pagoda, but a square hall with a pyramidal roof;²⁷⁹ so that there may have been a new need for communication between the two elements). A possibly parallel case is provided by one of the great Tendai halls of Enryakuji on Hieizan, of which it is recorded that "in (979) . . . were constructed a verandah, a bridge, etc. for the *raidō* of the hall of Shaka."²⁸⁰ The latter can hardly have been anything but a means of passage between a detached *raidō* and the hall proper. The variant phrasing may mean that the Hieizan "bridge" was uncovered, while the Kōyasan "bridge building" had a roof and perhaps walls.

In 1093, the author of the Okunoin history notes that "the three *ken* three *men* Haiden is said to have been altered to seven *ken* four *men*. But is there not some mistake here? What is visible today is one five *ken* four *men*."

The record thus shows the gradual enlargement of the space devoted to open worship. Its use of the term Haiden instead of the later standardized *raidō* is an indication of the early date at which such worship was begun. The building itself must at the outset have been entirely isolated, since it could not have been attached in any integral way to a small tomb pagoda. Afterward, when the pagoda was replaced by a hall with an interior capable

²⁷⁷ Quoted under "*raidō*" in *Koji-ruien*, *Shūkyōbu*, iii, p. 85.

²⁷⁸ In *Zoku-gunshoruijū*, xxviii/1, pp. 267 ff.

²⁷⁹ *Do.*, p. 266. The tomb pagoda and accompanying buildings were destroyed in a fire of 952. Its rebuilding a few years later was in the shape of a "jewel-shaped hall" 寶形堂, i.e. a square building with a jewel-shaped finial.

²⁸⁰ From the *Tendai-zassu-no-ki* (a record of events under the successive abbots of Enryakuji, written 1287), *Zoku-gunshoruijū*, iv/2, p. 580.

of accomodating services, the reconstructed Haiden may have been linked to the new sanctuary by a covered passage.

A second ninth century instance concerns the monastery of Kōryūji, at the west of Kyōto. The early buildings here had been completely destroyed by a fire in 818. The inventory which records their rebuilt form dates from 890. At the head of the list of buildings and treasures, stands the entry: ²⁸¹

"One cypress-shingled five *ken* Kondō, with aisles 庇 on four sides. Height 15.6 *shaku*, length 88, depth 44.3. . . ."

The text describes the Kondō in greater detail, and adds:

"Front 'aisle,' *hisashi*, on one side 前庇壹面; height 9.6 *shaku*, depth 19.5. Provided with a railing. On present examination, in good condition, except that the railing is in great disrepair. Flooring boards, 136; on present examination, one board in great disrepair, the rest in medium disrepair. 110 boards laid within the *hisashi*, 26 laid (as a verandah inside) the railing. Suspended, half-length shutters on four sides; these were added during the Jōgan era (859-876) by the late steward Genkō-daihōshi, and on present examination are missing. With two 'walking-through' doors, height 5.5 *shaku*, on the east and west gable ends, the same 12 (... characters missing). On present examination, in medium disrepair."

Still under the heading of the Kondō, the list of contents includes:

"*Raidō* column-wrappings 禮堂柱纏 eight pieces, silk outside and linen inside. Presented by the late steward Genkō-daihōshi. . . ." ²⁸²

The term *raidō* here can hardly signify any other element than the "front aisle" mentioned earlier. The latter term alone, it is true, suggests a *magobisashi* like that of the main hall on Hieizan, rather than a detached building. In all other inventories known to me, however, the presence of a *magobisashi* is noted immediately beneath that of the *hisashi* proper, or normal aisles, as an integral part of the hall. Here the entry comes after a discussion of the condition of the Kondō roof, and a list of its doors, as if the element were a separate one. The choice of words may be explained by the supposition that the Kōryūji *raidō* was covered—like an attached aisle—by a penthouse roof of a single slope (fig. 89). Just this combination of a shed-like *raidō* and a main hall some distance behind it, is illustrated in a late thirteenth century picture-scroll, the *Ippen-shōnin-eden* 一遍上人繪傳, in a view of the then existing temple of Kōmyōfukuji 光明福寺 in Hyōgo-ken (fig. 97). ²⁸³

The fact that additions were made to the Kōryūji *raidō* in the third quarter of the century furnishes a terminus of date; the whole complex was probably erected within the generation following the fire of 818. It is worthy of notice that even at so early a period the architectural character of the fore-building was no longer bound by Chinese tradition. Its function must have been to accomodate lay worshipers; appropriately, therefore, its

²⁸¹ Cf. above, note 262, under Kōryūji. The *K-shizai-kōtai-jitsurokuchō* says: 前庇壹面...在高欄今校全但高欄大破敷步板壹百參拾陸枚今校一枚大坂餘中坂百十枚庇內敷卅六枚高欄敷懸半蔀肆面...今校無寶行戶貳具高五尺五寸在東西妻同十二口也今校中坂 (from *D-n-bukkyō-zensho*, *Jishi-sōsho*, iii, p. 55).

²⁸² *Do.*, p. 57.

²⁸³ Published in *Nihon-emakimono-shūsei*, xxii.

construction seems to have been at least semi-domestic in type. The recorded details, wood flooring in place of a stone pavement, and grilled shutters instead of solid walls or swinging doors, were elements of the fully developed Heian palace, not of the conventional Nara temple in T'ang style. The change is thus one of the earliest signs of a reassertion of national preferences in architecture, after the imitativeness of Asuka and Nara. Wood floors and hanging shutters must have existed throughout a wide substratum of domestic building practise, little affected by alien fashions, in the eighth century; even in Nara monasteries, for the Saidaiji inventory attests the presence of board flooring in the living quarters of the monks. The comfortable Japanese tradition had been followed at Saidaiji in the forehall of the Small Pagoda Precinct, as well ²⁸⁴ (perhaps because of the latter's relative unimportance). At least by the second quarter of the ninth century, the reaction had reached that part of the main hall complex which was primarily for lay use. The next step, in theory, should have been its extension to the hall proper; and although no certain evidence supports so logical a chronology, wood floors do exist throughout the "golden" hall of Murōji, attributed to this period.

The absence of any mention of flooring in connection with the Kōryūji Kondō suggests that here the icon hall itself still possessed a stone pavement in Nara style. Such a contrast is still to be seen in some mature temple buildings of Kamakura, in which the distinction between public and secret areas, *gaijin* and *naijin*, is emphasized by a respective use of wood and stone or cement, although the whole complex is united under a single roof. The tradition is still obscurely remembered even in the latest developments of Japanese temple architecture, serving the popular sects of the Edo period. In such enormous halls as those of the Chionin 知恩院 or Honganji 本願寺 temples in Kyōto, the areas open to lay worshippers are entirely covered with matting (inevitable in Japanese residences since the fourteenth century). The areas used by the priests alone are floored with polished boards.²⁸⁵

An inventory recording the state of the Shingon monastery Daigoji in late Heian, included in the *Daigoji-zōjiki* 醍醐寺雜誌記, contains the following item, which seems to refer again to an isolated *raidō*: ²⁸⁶

"Hall of the Juntei-(kannon): one main hall, three *ken* four *men*; one corridor, five *ken*; one *raidō*, three *ken* four *men*. . ."

The use of identical phrases here to describe both major plan elements shows that both had the same design, an open central area plus an ambulatory. This must have been a *raidō* of much greater monumentality than that of Kōryūji, equivalent in importance to the sanctuary it served, and probably the same size. Since it can have possessed no chancel proper, its plan must have been the result of structural convenience rather than liturgical necessity; the large area to be roofed required interior posts, which for a monumental effect were made symmetrical about both axes. The phrasing of the inventory, again, indicates that *raidō* and main hall must have been connected by a corridor five bays long—the third member of the complex, made necessary by inclement weather in a scheme of any elaboration (fig. 90). This stage of plan evolution had possibly existed in

²⁸⁴ See above, p. 61.

²⁸⁵ See below, p. 280.

²⁸⁶ Quoted by Fukuyama, "Tendai Shingon," p. 68.

the previous century, in the Okunoin of Kōyasan, with its "bridge building." It seems to have been used even as early as Nara, in the refectory unit of Tōdaiji, which may stand as the earliest Japanese ancestor of the type.

One further note attests the existence in Heian of the *raidō* as a detached building. The Japanese pilgrim Jōjin, travelling among the great T'ien-t'ai monasteries of China in the latter part of the eleventh century, describes among these a "Precinct of the Buddha's Tooth," Fo-ya-yüan 佛牙院, in the capital city, K'ai-fêng:

"There is a four-storeyed treasure pavilion, of sevenfold magnificence, supremely marvellous inside and out. The four-sided cloister corridors all contain priests' dwellings. Directly in front of the treasure pavilion, interrupting the corridors to left and right, like a *raidō*, there is a great hall, the central part of which contains a priest's residence. . . ." ²⁸⁷

The description suggests a layout comparable to that which is visible today in the Eastern Precinct of Hōryūji. There the Yumedono stands at the center of the court, in place of the "treasure pavilion"; while a *raidō*, on axis to the south, has the position once allotted to a middle gate. Jōjin's phrase, "like a *raidō*," shows that he was familiar with such combinations in his own land.

The clearest proof known to me of the third Heian solution of the plan problem of esoteric Buddhism—the construction of the *raidō* as a fore-building in actual contact with the main hall—is furnished by the history of one of the buildings in a famous establishment of the Fujiwara clan. This was the monastery Myōrakuji, founded in the last quarter of the seventh century by priest Jōe on the peak of Tōnomine in Yamato on behalf of his deceased father, the great Minister Fujiwara no Kamatari. In the *Tōnomine-ryakki* of 1197, the origin, vicissitudes, and final state of the building here in question, the lecture hall, are given in a series of quotations from earlier sources, as follows: ²⁸⁸

"Lecture hall: cypress-shingled roof; five *ken* four *men*, with *raidō*. Originally three *ken* four *men*.

"The *Kesaiki* says: 'A relic was installed under the thirteen-storey pagoda. Some years later, south of the pagoda there was built a three *ken* four *men* hall, called Myōrakuji.' An official report to the Throne, dated Tenroku 3/2/14 (972) says: '(According to) the *Kesaiki*, priest Jōe in 679 set up a pagoda, and after the passage of years built the lecture

²⁸⁷ *D-n-bukkyō-zensho, Yūhōden-sōsho*, iii, p. 466. 當寶閣前隔左右廊如禮堂有大殿。

²⁸⁸ *Gunshoruijū, Shakkabu*, pp. 439-40. 講堂檜皮葺五間四面禮堂作元三間四面 荷西記云安置遺骸於十三重塔之底經年之後塔南建三間四面堂號妙樂寺矣天祿三年二月十四日官奏云荷西記定專和尚白鳳七年建立塔婆經年之後建立講堂比記雖云經年恨不記年數矣天祿三年三月二十八日氏長者御願文云白鳳十一年三月內大臣長子定專和尚初建講堂矣要記云三間檜皮葺堂四面庇其中南面孫庇也名曰講堂延喜十六年始修理之同十七年修理畢延長三年當國目城上利春始造高欄同四年造飛簷并葺大藏行直加材木天慶九年改檜皮葺以瓦七年三百枚葺之忠幹朝臣加稻五百束矣後記云講堂本瓦葺三間四面也前前國司雖加少少修理柱桁皆悉朽損故增賀上人于滿再興之天祿二年二月八日壞却舊堂自同三年三月二十八日始造新堂覺忍阿闍梨以佐伯祿雅文申成當國權大掾以彼任料三百貫文加是今講堂者五間四面兩棟作檜皮葺四面庇內陳者堅三間橫五間天井首裏構南面在隔子五間東西脇各在開戶一具北方在車戶一具外陳者堅二間橫五間南面在開戶三具東西脇各在開戶一具四面各在板緣并高欄...

hall, etc. While this record speaks of the passage of years, it unfortunately does not give their number.' The August Dedicatory Prayer of the Head of the Clan, dated Tenroku 3/3/28 (972) says: "In 683 the eldest son of the Minister, priest Jōe, first built the lecture hall."

"The *Yōki* says: 'a three *ken*, cypress-shingled hall, with *hisashi* aisles on the four sides and on the south side (also) a *magobisashi* extra aisle; called the lecture hall. Restorations upon it were begun in 916 and finished the following year. In 925 the Senior Secretary of the province, Ki-no-kami Toshiharu, first built a verandah rail; in the next year he built flying eaves and grilled shutters, Ōkura Yukitada providing the requisite timber. In 946 the cypress-shingled roof was made over into a tiled one, 7300 (tiles) being used to cover it. (Towards the expense of this, the court noble) Tadamiki-ason contributed 500 sheaves of rice."

"The *Koki* says: 'The lecture hall had a regular tiled roof, and was three *ken* four *men*. Although the last provincial government but one had added very minor restorations, columns and roof beams were all in decay. For this reason it was reerected by Zoga-shōnin and Semman. In Tenroku 2/2/28 (971) the old hall was torn down, and from 3/28 of the next year the new hall was under construction. Kakunin-ajari having commissioned Saeki Rokuga to petition the Deputy Senior Magistrate of the province for an allowance of 300 *kammon*, this was granted. The present lecture hall is five *ken* four *men*, with two ridgepoles, cypress-shingled roofing, and an aisle around the four sides. The *naijin* chancel is three bays lengthwise by five in breadth, the ceiling being an open roof construction. On its south side are five bays of grilled partitions, flanked on east and west each by one set of swinging doors; on the north is one set of doors on wheel (pivots). The *gaijin* public area is two bays lengthwise by five in breadth. On its south side are three sets of swinging doors, flanked on east and west each by one set of swinging doors. On each of the four facades is a board verandah and a railing. This was completed in Tenroku 3/9/3 (972). The Master Artisan was Tsunenori. In 9/5 of the same year the ceremony of dedication was held, the Officiating Priest being Zoga-shōnin and the Reciter of the Prayer in behalf of the Donor, the Kengyō Semman. The August Dedicatory Prayer of the Head of the Clan was prepared by the Governor of Noto, Minamoto no Shitagō, grandson of the Commissioner of the Right City Office, Itaru, and son of the Left Master of Horse, Yozuru; and is contained among the official documents.'"

"The aforesaid hall was destroyed by fire at the time of the conflagration of the Shōan era (1171-4). . . ."

A reconstruction of the successive stages of the Myōrakuji lecture hall, based on this record, may be attempted as follows. The original building of the Nara period doubtless followed the conventional Nara formula of chancel and ambulatory. The phrase used to describe it, "three *ken* four *men*," stipulates merely the length of the chancel and the fact that it was surrounded by aisles on four sides. The whole building, thus five bays long, had probably the normal proportionate depth of four bays, making a chancel area 3 by 2. The description of the hall as having a supplementary *magobisashi* on its south facade in addition to the ambulatory, seems to refer to a later stage, perhaps following the restorations recorded for 916-7. Later in the century, as we have seen, the same addition was made to the main hall of Enryakuji on Hieizan.

The final Heian form of the Myōrakuji lecture hall, as reconstructed from its description in the *Tōnomine-ryakki*, is presented in the tentative ground-plan and rough perspective of fig. 91. Most of the elements are listed so clearly that their character and relationship are hardly mistakeable. The account draws an obvious line of demarcation between the lecture hall proper, with the "*naijin*" as its nucleus, and a supplementary element, called in the detailed account the "*gaijin*," and undoubtedly corresponding to the "*raidō*" listed at the head of the quotation. This distinction must have been that between the secret and open halves of the esoteric icon hall, which we have seen under a single roof in the mature Kamakura version of Saimyōji, and expressed in two separate buildings in other temples of Heian. It is listed as taking the form of a line of grilled partitions and doors on the south side of the hall proper—the treatment seen at Saimyōji, and normal to the Kamakura type. The inventory clearly defines the two areas to north and south of this line as constituting a single building. All doors, etc., are carefully listed; none are mentioned as belonging specifically to the north side of the *gaijin*. Had the latter existed as a separate building, its rear, facing the sanctuary, would have been a blank wall. The terms of the problem reduce this to an absurdity. The openings on the north side of the *gaijin* are not mentioned because they were the same as those on the south side of the hall proper. The two areas must have shared a common dividing line of columns and grilled screens; and hence in ground-plan constituted a single structure.

The text makes certain the reconstruction of the secret half as a chancel five by three with a surrounding ambulatory. With specific reference to the open half, or *raidō*, the only element mentioned is the five by two *gaijin*. Comparison with the type of esoteric hall current in Kamakura and later would indicate that the *gaijin*, as a nucleus, was enclosed on front and ends by an aisle corresponding to that in the secret half. It is probable that this is what was meant in the inventory by the phrase "an aisle around the four sides"; for if the latter referred to the secret half alone, it would be merely a repetition of the idea contained in the previously stated "four men."

The ground-plan of the whole thus indicated is quite close to that of the present hall of Shaka of Enryakuji on Hieizan, a Kamakura building which originally served as the main hall of the rival Tendai headquarters at Onjōji 園城寺 on Lake Biwa.²⁸⁹ In the

²⁸⁹ A history of the restoration of the Western Precinct of Enryakuji after its burning by Oda Nobunaga, is contained in the *Saitō-dōsha-narabini-kakubō-seifu* 西塔堂舎並各坊世譜, compiled by Fujiwara no Ason Tsunemasa 常雅 in 1732 (in the anthology *Tendaishū-zensho* 天台宗全書, Tōkyō, 1937).

"In (1571), the main hall was burned down by enemy fires. In the Tenshō era (1573-91), the main icon (which had disappeared) was returned to the mountain (by a miracle earlier described). In the next year (1586) Senshun 詮舜 (the finder), according to his plan, set up a thatched-roof hall 艸堂 upon the old site. In (1595) he was about to rebuild the main hall anew, when he met the Regent Toyotomi, who had pulled down Miidera 三井寺 (i.e. Onjōji). In this way he was presented the material for this hall, by way of assistance; and the (resulting) hall is the present one . . . (etc., on extensive repairs undertaken in 1687)."

I have been unable to find any proof that the re-used timbers came from the Miidera Kondō (though the large size of the completed building makes this probable); or any clear description of the Miidera Kondō in Kamakura times. The Onjōji record, *Jimon-kōsōki* 寺門高僧記, iv (*Zoku-gunshoruijū*, xxviii/1, pp. 53 ff.) states that after the general conflagration of 1121 (when Onjōji was burned down by the monks

Shakadō the *raidō* aisle seems, from the plan alone, to run across the front of the building only. Actually it continues across the ends as well, as an area covered by the typical aisle rafters in contrast to the flat ceiling of the open middle area; the end interior columns are simply omitted for greater spaciousness.

In one very important particular, however, the tenth century lecture hall of Myōrakuji seems to have been unlike the mature Kamakura type to which its ground-plan presented such striking similarities. The inventory speaks of "two ridge-poles." This can hardly be explained except by a reconstruction of the building with two roofs, one over each half, meeting at the partition line. No example of such parallel roofs, rising, as these would have had to, from a common wall between, exists in Japanese architecture today, and I know of no certain pictorial evidence attesting their existence in an earlier period. The construction would have resulted in an awkward junction of the two interior slopes, visually unsatisfactory and difficult to make watertight. In remaining Japanese architecture, a major roof is very seldom interrupted in any way in its descent to the normal eaves line. The closest analogy to the reconstructed cross-section of Myōrakuji is given by the typical Shintō Hachiman shrine complex, with one gabled building in front of the other; here, however, there is an appreciable interval between (covered by a low, flat roof running in the opposite sense) so that the main slopes are unbroken (fig. 38). The same intermediate space occurs in the present Hokkedō of Tōdaiji, between the Nara nucleus and the Kamakura *raidō*, and would have made possible a covering of the whole complex by two parallel roofs, without any inconvenient intersection of one by the other (figs. 172, 173). It seems likely that such a roofing system was actually used in the Hokkedō, before the adoption of its present complicated single covering in the thirteenth century.²⁹⁰ In the Myōrakuji inventory no intermediate element is listed. The hall proper with its surrounding ambulatory corresponds to the Nara nucleus of the Hokkedō; but where the latter possesses two additional east-to-west aisles between it and the large *raidō* room, Myōrakuji apparently had its *raidō* directly adjacent to the rest, with only a partition between.

Under these circumstances, a design of parallel, intersecting roofs seems contrary to strong Japanese tradition. On the other hand, all that can be discovered of the history of the Japanese icon hall indicates this design as a natural step in evolution. Evidence points to the fact that the *raidō* began in Japan as an entirely isolated structure some distance in front of the hall proper, an object of experiment as early as the beginning of the eighth century. An advance toward greater convenience brought the connection of the two elements by a covered passageway; this step also being perhaps accomplished in the eighth century, in the Tōdaiji refectory complex. The final consolidation was begun by moving the *raidō* into direct contact with the sanctuary it served. By the Kamakura period, fusion was completely attained with the two under a common roof. It is reasonable

of Enryakuji) the Kondō was rebuilt shortly after, and was dedicated in 1134. The text of the dedicatory prayer (p. 54) describes it as "cypress-shingled, 3 ken 4 men," and that of the versified prayer (p. 56) as "2-storeyed" 二階. No such description fits the present Shakadō on Hieizan; so that if the Onjōji Kondō was used, it must have been a later and larger one. Frequent burnings make the architectural history of the temple too difficult to unravel except by special study.

²⁹⁰ See below, p. 256 and note 443.

to suppose, however, that this last advance, in cross-section, was not synchronous with the final change in ground-plan. There must have been a transitional phase during which the *raidō*, although in contact with its sanctuary, was still thought of as the independent building which it had previously been, and thus was provided with its own roof. Indeed, it is improbable that Japanese building technique could by the tenth century have been freed sufficiently from Nara tradition to permit the covering of the Myōrakuji lecture hall by one all-enclosing roof. The Chinese practise which entered so deeply into Japanese architectural habits in early centuries, has always stipulated (except for regional heterodoxy) that every major architectural element must be individually roofed, no matter what its position. As will be seen in detail below, the very combination which I have reconstructed at Myōrakuji in the tenth century is widespread in Chinese architecture today, and may with confidence be carried back on the continent to an even earlier date.²⁹¹ The Chinese analogy perhaps indicates the source of the innovation made in the Heian period. In China the design concept of block plus individual roof has persisted in spite of all practical inconveniences arising from the combinations it encourages. In Japan, as we have seen, the imported structural ideal gradually passed out of use, being profoundly altered in Heian by the development of a roofing technique completely opposed in principle to the Chinese. This advance must have permitted the existence of so impractical a design as the twin roofs of Myōrakuji for a comparatively brief period only. By the thirteenth century, the evidence of remaining halls like Saimyōji shows that the old sense of distinction between independent elements had been largely lost; and that the evolution of the native double-shell roof, with its invisible framing and its lack of integral relationship to the subdivisions of plan beneath, had produced a new and ultimate solution, both more efficient and more agreeable visually than the former.

Possible corroborative evidence for the existence of the Myōrakuji twin roofs is furnished by the history of another, more celebrated building, the hall of "baptism," or Kanchōdō 灌頂堂 of the Shingon headquarters at Tōji in Kyōto. An account of the vicissitudes of this hall—of prime importance in the sect since the ceremony of *Kanchō* which it accommodated was the one means of initiation into the higher mysteries of the order—is contained in a mid fourteenth century compilation of temple records, the *Tōhōki* 東寶記.²⁹²

²⁹¹ See below, pp. 179 ff.

²⁹² Published in *Zokuzoku-gunshoruijū*, xii, *Shūkyōbu* (Tōkyō, 1907), pp. 29 ff.

當院代代修造次第

長者補任云後三條院延久元年巳酉長者長信僧正濟延大僧都...大風東寺灌頂堂顛倒畢云云 東寺講特蒙天恩被恤給作新造立灌頂院所狀

五間四面正堂一字葺檜皮

七間禮堂一字 同前

五間二面護摩堂一字 同前...

今月七日大風三字堂舍一時顛倒悲哉々々兩界諸尊和莊嚴於塵土祖師影像消丹青於雨露加之恒例不易之御願忽失勤修之處數百餘歲之佛事亦有闕怠之怖是以寺家勵力先造立正堂一字縱雖不及造畢且欲勤修御願...

私云...依大風顛倒於五間四面正堂者不日造立之於禮堂等者賜叙爵新後年造立之...至建久二年依後白川法皇御願及當寺諸堂修理之朝議...其內灌頂堂...被修造之大略如新造母屋柱十二本內古柱只二本也其餘新被立之。

The section devoted to the Kanchōdō, partly a quotation from an earlier source, and partly the author's own composition, opens as follows:

"Kanchōdō.

"The various restorations of this precinct, in order, have been:

"The Register of Priors, *Chōja-bunin*, says: 'The first year of Enkyū (1069) under the now cloistered Emperor Go-sanjō: the Chōja Chōshin-sōjō and the Daisōzu Saien reported in 9/7 that a typhoon had blown down the Tōji Kanchōdō. Tōji begged as a special favor that the Imperial Benevolence would in Its mercy be so gracious as to erect this anew, and set up the Baptismal Precinct in the following form:

"Five *ken* four *men* main hall, one building, cypress-shingled roof;

"Seven *ken* *raidō*, one building, ditto;

"Five *ken* two *men* *gomadō* ("hall of burnt offerings"), one building, ditto.

The above Baptismal Precinct was first established in temporary form by Kōbō-daishi for the purpose of transmitting the Light. Within the hall were installed the painted figures of the Twin *Mandaras*; on its walls were pictured the true portraits of the Teachers transmitting the Law. It has been a basis of the guardianship and protection of State and people, a source of the flow and spread of esoteric doctrines. Here the Shōsōzu Jitsue received the instruction and orders of the Great Master, and here the August Vows of "Baptism" were first made. Henceforth these have been performed every year up to the present, without fail; in the morning have been given the Commandments of the *Samādhi* of the Buddha-nature, with those who receive them together vying each to surpass the others, and all far removed from the sordidness (of the world); and in the evening have been performed the secret rites of the "Baptism" establishing relationships (with the Buddha Way), bringing together all the forms of such relationships and fully opening out the blooming Buddha seed. . . . On the seventh day of this month, a typhoon has blown down the three buildings together. To our distress the images of the Twin *Mandaras* and the majestic adornments have (fallen) into the mire; the portraits of the Founders have had their colors effaced by rain and dew. Not only this, but the sudden loss of the place, where have been performed by immemorial custom these difficult August Vows, has brought with it the fear of an interruption of this religious practise, now of several centuries' duration. Therefore the priests of this temple have vied with each other in setting up a main hall, as the first (work of re-) construction; and although they have not yet attained its completion, are still anxious to carry out the practise of the August Vows. However, the possessions of the priests of this temple are reckoned to be inadequate for this purpose; its fief of 1000 households exists in name but not in fact. That is the reason for the ruined and abandoned state of the offices within the temple; and the seven *ken* four *men* lecture hall is in such extreme disrepair that it seems almost ready to collapse. Therefore (we beg) that for one or two years to come there may be specially granted a work of construction which will gradually bring this task to completion, during which time the utmost effort should be directed toward repairs. We hope and implore that the Imperial Benevolence will in Its mercy be so gracious as to cause these buildings to be speedily reerected (so that we may) carry out the practise of the August Vows through successive generations, and continue the original desires of the Founder, and that we may offer prayers for the peace and tran-

quillity of state and people. Therefore reverently we beg that this may be attended to. Enkyū 1/9.'"

(The following account from the same source, the *Chōja-bunin*, tells of a later burning of the precinct in 1252, and reerection in the same year. Thereafter the author of the *Tōhōki* resumes his own account:)

"I say: In Enkyū 1/9, (1069) it was blown down by a typhoon. As to the five *ken* four *men* main hall, that was soon set up again. As to the *raidō*, etc., a subsidy was granted, and in later years it was reerected. In Chōji 2 (1105), an official notice was handed down that the example of the Enkyū period should be followed in granting a subsidy, and ordering that the *raidō* etc. of the Kanchōin should be restored. This was carried out by the lay steward of the brotherhood, Tadanori. . . . In Kenkyū 2 (1191), by the August Vow of the cloistered Emperor Go-shirakawa, a restoration of the various halls of the temple was decided upon by the court. . . . During this the Kanchōdō, by official order, received a restoration amounting almost to rebuilding. Of the 12 columns of the chancel, only two (re-)used were old ones, the rest being set up new. Thereupon the ceremony of dedication was carried out. . . . Next it was burned in Kenchō 4/9/2 (1252) . . . the work of rebuilding was soon finished, and the dedication rites were held in the same year, 12/16. . . . (A final restoration is listed in 1343)."

I have quoted this record at length because a number of its details are of interest for the evolution of temple planning under esoteric Buddhism. Unquestionably the *raidō* referred to here was a separate building, at least in the sense that the main hall could be erected without it. Such separation would of course have been impossible in a fully fused Kamakura design. At Myōrakuji, on the other hand, where the two elements seem to have had separate roofs, it would have been quite feasible to construct one before the other. Thus from the evidence given it is not certain whether the Kanchōin consisted of two blocks sharing a common wall, like Myōrakuji, or of two separate buildings, like the typical Haiden and Honden of Shintō shrines. The *Tōhōki* contains a ground plan of the Kanchōin of its own time, the mid fourteenth century, which shows *raidō* and sanctuary as contiguous elements. At that time the complex probably possessed the single, all-enveloping roof characteristic of mature Kamakura style. I know no means of determining from what date the single roof may have been in use; nor whether the fourteenth century drawing may have held good, also, for the combined plans of the two buildings set up separately after the typhoon of 1069. It is possible that this last was so, since in the case of another building, the Fudō hall, the *Tōhōki* gives two drawings to show a plan alteration.²⁹³ Presumably any important change in the layout of the Kanchōin would have been recorded by two ground-plans in the same way. The substitution of one roof for two could have taken place in the extensive restorations of 1191, or in the rebuilding after the fire of 1252.

The record of the Kanchōin, stressing the uninterrupted performance of "baptismal" rites from its foundation by Kōbō-daishi until the disaster of 1069, makes it plausible to assume that the original hall was in existence up to the typhoon. Since the presence of a *raidō* seems to have been a convenience rather than anything essential to the service, I know no means of determining whether this element was included in the precinct from

²⁹³ *Ibid.*, pp. 58-59.

the start or was added at a later time to the original main hall. The dictionary of esoteric practise, *Mikkyō-daijiten* 密教大辭典, speaks of the *raidō* as accommodating a ceremony prefatory to that of the "baptism" proper, the reception by the initiate of the "*samādhi* commandments" (*Sammayakai* 三摩耶戒). There is no sign that this had been its use since the earliest days of Japanese Shingon, however; and since the requirements of the *Sammayakai* are merely a small curtained area for three men, it is quite possible that this ceremony may have originally taken place in some part of the main hall, if the *raidō* was not then in existence.²⁹⁴ The main hall itself, as shown in the *Tōhōki* plan, might well have existed in substantially the same form in the ninth century. The disposition of its pillars around chancel and aisles was clearly determined by two constant factors, the objects of worship hanging between them: the Twin *Mandaras* in the middle, and the portraits of the Shingon founders around the walls. This program of accommodation was the same in the ninth century as in the fourteenth; and doubtless effected a retention of the original plan through all the restorations from 1069 on.

The existence of another building which must have resembled the Myōrakuji complex is recorded in the twelfth century inventory of the Shingon monastery of Kanjūji 勧修寺 in Kyōto, Imperially established in the first quarter of the tenth century. This source, the *Kanjūji-kyūki* 勧修寺舊記, opens as follows:²⁹⁵

"Halls, living quarters, and Buddhist images:

"Hall of the August Vow. South of the main hall; five *ken* four *men*, with seven *ken* *raidō*; roofed with cypress shingles.

"The said hall had the honor to be erected by the Empress Dowager, mother of the Son of Heaven of the Engi (era), for the purpose of extending the rewards of her maternal grandfather, the Assistant Vice-minister of the Imperial Household, Miyamichi 宮内少輔宮道; the chief of the Office of Works in charge of construction being the *Dhyāna* Master Shōjun 禪師承俊; so it is said. As to the day of dedication, refer to note.

"In Enchō 3/8/22 (925), the court nobles carried out in this hall the August Mourning Rites for the Empress Dowager; the objects dedicated being woven figures of the Five Buddhas, together with a copy of the *Lotus Sūtra* by the Imperial brush. . . ."

(An intermediate section is omitted)

"As to the adornment of the hall:

"Originally, between the august hall and the *raidō*, doors were set in each inter-columniation. Within the hall were the seats of the various priests; the laity assembled in the *raidō*. In Hōan 3 (1122), at the time of the restorations (undertaken by) the late Lord of the Ansatsu Mansion, grilled shutters were hung up along the south side of the

²⁹⁴ Cf. Kambayashi, "Shingon no Gyōji-sahō," *Bukkyō-kokugaku-kōza*, ii, under heading *Kanchō*, sub-head *Sammayakai-sahō*. The three are the initiate, his sponsor, called the *Kyōjū* 教授, and the teacher, or *Ajari* 阿闍梨. Other priests chant hymns etc. outside the enclosure.

²⁹⁵ Cf. *Zoku-gunshoruijū*, xxvii/1, pp. 86 ff., 93, 96-7.

堂莊嚴事

元是御堂與禮堂之間每間立戶堂內爲諸僧座氏人着禮堂保安三年故按察殿修造之時禮堂南面懸格子又破弃中戶以禮堂爲氏人并諸僧座堂莊嚴多以改易

其日百僧座堂中親王公卿座借庇親王西方公卿東方皆北面諸大夫而庭帷。

raidō, and the interior doors were removed, so that the *raidō* might be used to seat both laity and priests. . . ."

(An intermediate section is omitted)

"In Enchō 3/8/23 (925) were dedicated at Kanjūji a copy of the *Lotus Sūtra* written by the Imperial hand, and a woven *Mandara*. On this day, a hundred priests sat within the hall. The Imperial Princes and the court nobles sat in a temporarily erected shelter, *hisashi*, on east and west sides respectively, all facing north. The great officials sat in tents in the courtyard. . . ."

The sum of these excerpts proves that the Kanjūji hall itself was opened formally in 925, with the dedication of images and a *sūtra*. The *raidō*, however, seems to have been a somewhat later addition; since although it was the normal place of assemblage for the nobility later, its use on the day of the ceremonies is not mentioned. The "temporary shelter" 借庇, or *hisashi*, which then seems to have served in its place may well have been a structure like the "front *hisashi*" of Kōryūji, discussed earlier; separated from the hall proper, roofed by a single slope only, and enclosed by curtains. Since the need for some sort of *raidō* existed at the outset, it is probable that a permanent seven-bay fore-hall was added against the south side of the main hall, before the passage of many years. As in the case of Myōrakuji, mention of the line of doors dividing secret and public halves makes it clear that the ground-plan here formed a single building. It may be presumed that the cross-section, in the same way, took the form of parallel roofs.

Unfortunately no evidence of the later Heian period remains to illustrate any advance in complex planning beyond the stage of Myōrakuji and Kanjūji. One building which is often attributed to the twelfth century—the Yakushidō in Kōchi-ken²⁹⁶—clearly shows the final fusion in its somewhat simpler type of plan. What remains of the old ambulatory tradition is a space twice as wide on the ends as across the back, and three times as wide in front, making a spacious *raidō*. The chancel, with a narrow altar across the rear only, is perfectly adapted to the needs of esoteric ceremony; while small scale makes it most improbable that there was ever more than a single roof. Unfortunately the date ascribed rests only on temple tradition, and on an inscription inside one of the icons. It is known that the *gaijin* was restored in the last quarter of the sixteenth century, while the front porch is an obvious late addition. It seems to me probable that the building's exceptional maturity is the result of a thorough rearrangement, rather than an original feature.

From other texts it is possible to gain a somewhat better idea of how the *raidō* was used; of the class of buildings to which it was added; and of the relationship in time between the appearance of the element and the introduction of esoteric Buddhism.

As to the purpose of the *raidō*, I submit the following quotations; first from the twelfth century *Honchō-seiki* 本朝世記:²⁹⁷

"Tenkei 4/8/26 (941); on this day was held the National Mourning for Emperor Kōkō, for which reason all public offices suspended business. On this day the Chancellor went to Gokurakuji to dedicate a complete Buddhist canon. . . . The members of the Council of State ascended into the *raidō* to perform a period of *sūtra* chanting for the

²⁹⁶ Cf. Amanuma, *Zūroku*, p. 319; Ōoka, "Tendai Shingon etc." under Kōchi Yakushidō.

²⁹⁷ Quoted under "*raidō*" in *Kōji-ruien*, *Shūkyōbu*, iii, p. 86.

Emperor. As Imperial Envoy, the Director of the Imperial Archives, Lord Minamoto, holding the baton of office, was in the *raidō* performing the period of august (*sūtra*-) chanting for the Empress. . . ."

In the twelfth century ecclesiastical history *Fusō-ryakki*, the account of a great ceremony held in 929 at the Kyōto temple Hōshōji 法性寺 to celebrate the fiftieth birthday of its founder, Fujiwara no Tadahira 忠平, includes this note: ²⁹⁸

"Fifty priests marched from the great gate to the hall. The assembled great nobles and officials were in the *raidō*. . . ."

The *Tōdaiji-yōroku* describes a visit made to Tōdaiji in 986 by the Retired Emperor Enyū: ²⁹⁹

"The Imperial procession went on to the refectory, where (as the hall of the Great Buddha) the August Dais had been placed in the *raidō*. A thousand monks sat at long benches on east and west, to partake of the hot food offered them. . . ."

It is interesting to notice here that the term *raidō* is used to denote a function rather than any specific architectural element. Applied in this case to the conventional Nara ground-plan of the Great Buddha hall (fig. 15), it must refer to the outer of the double aisles on the south; while in the refectory complex it probably means the whole forehall. ³⁰⁰

We have seen that one whole class of minor monastic buildings, used almost exclusively by the priesthood alone, continued the Nara plan formula throughout the Heian period because they were not affected by the problems pressing upon more public halls. At the other extreme, a similar conservatism seems to have been characteristic of the largest constructions of the period. In the very detailed records of the dedications of the greatest Kyōto temples, from Michinaga's Hōjōji on, the word *raidō* does not appear. It is probable that the element—in a sense corresponding to any of the three Heian plan solutions, the extra southern aisle, the isolated building, or the attached forehall—was there completely absent. Such monasteries in their general layout followed the Nara tradition at least in preserving the monumentality of an axial and symmetrical courtyard scheme. It is almost impossible to imagine the *raidō* of contemporary descriptions among the formally disposed elements of such planning. As an independent building, the only position possible to it which would not have destroyed the traditional courtyard was that which the Yumedono *raidō* has today, in place of an original middle gate. In the Kyōto monasteries, however, middle gates were retained as an integral part of their provision for ceremonial. The *raidō* as an extra aisle along the front, or as a fore-hall attached to the main block with its own lesser roof in front of the other, would have been inadmissible in the formality of an Imperial Heian temple. A clear analogy is furnished in present-day Peking, where buildings with fore-halls in the manner of Myōrakuji are relegated to the minor, domestic courts,

²⁹⁸ Enchō 7/9/17 entry; quoted by *Kōji-ruien*, *ibid.*, p. 968 under "Hōshōji."

²⁹⁹ *T-yōroku*, ix, section on the commandments taken by the Retired Emperor 太上法皇御受戒記 (*Zokuzoku-gunshoruiju*, xi, p. 177).

³⁰⁰ The word *raidō* was later applied to the fore-hall of the Kōfukiji refectory, which had earlier been called *zenden* 前殿 (see note 87). The later term appears in the *Zoku-nankō-zatsuroku* 續南行雜錄 (a compilation of earlier records regarding the religious establishments of Nara, made by Maruyama Kachō 丸山可澄 in 1681; quoted under "Kōfukiji" in *Kōji-ruien*, *ibid.*, p. 1178).

and are absent entirely from the great compounds devoted to ceremonial. It is probable that the ground-plans of the main halls of Hōjōji, Hōshōji, Sonshōji, etc., showed a deliberate retention of the Nara formula for its monumental effect. The dedication records typically indicate a three-fold division of the hall interior into *moya*, *hisashi*, and *mokoshi*. The first was of course the open central area, the *naijin*, housing the main images and the altar. The *mokoshi* must have been an outer aisle with its own roof under the main eaves, as it is in the "golden" hall of Hōryūji. The *hisashi* lay as an inner aisle between. At Sonshōji:³⁰¹

"In the southern *hisashi* in front of the Buddha were spread out Chinese brocaded rugs, upon which were set six flower stands, running east and west and decorated with nacre inlay; these were covered by silks brocaded on a green ground, and fringed. In the southern *mokoshi* in front of the Buddha, in the bay west of the center set apart by screens, was spread out one double-bordered mat at a seat for the Decider. In the center bay were spread out two mats of the same kind as seats for the Leaders of Hymns. . . ."

The natural inference from such descriptions is that the chancel *moya* of the main hall typical of these monasteries was surrounded by two ambulatories. This is the ground-plan of the Great Buddha hall of Tōdaiji, which must have furnished the ultimate standard of monumentality as long as the Heian court continued the ceremonial traditions of that of Nara. The main halls of Hōjōji, Hōshōji, and Sonshōji contained colossal figures of the Buddha Birushana which must have been inspired by that of Tōdaiji. They seem actually to have had the same eleven-bay length overall as the Great Buddha hall (for the description quoted above from the Sonshōji dedication record locates three middle *mokoshi* bays which were used in services by the priesthood; while the previous paragraph had assigned four bays on the east and four on the west as closed areas for Imperial accommodation). On the great scale of such buildings, as at Tōdaiji, the extra aisle must have satisfied any reasonable need for space at the front (while still providing an unusable excess at the rear).

Mention of the element *raidō* in temple records is frequent from the tenth century on. In the ninth, the term appears rarely. It is not found in several inventories of great monasteries of the time, the absence being most striking in that of the Tendai headquarters, Enryakuji, dated 859. A few ninth century notices, on the other hand, make its existence certain. In the history of the reign of the Emperor Montoku, *Montoku-jitsuroku* 文德實錄, a note for Tenan fourth (858) records that "on this night at Hōōji 寶皇寺, vulgarly called Toritodera 鳥戸寺, 'golden' hall and *raidō* were completely burned."³⁰² According to the ninth century inventory of Kōryūji, the *raidō* in front of the "golden" hall of that temple must have been erected before the middle of the century, since it was presented with grilled shutters and column-wrappings during the Jōgan era (859-876). A variant copy of the Kōryūji inventory states that in the minor precinct Jitōin 寺東院, buildings with *raidō* were erected at the same period by the same donor, the Daihōshi Genkō.³⁰² Again, the

³⁰¹ *Sonshōji-kuyōki*, in *Gunshoruiju*, *Shakkabu*, p. 254. 南廂佛面敷唐錦地敷其上置立花机六脚東西爲妻机用螺鈿以青地錦爲面有網南裳層佛面西腋間副御簾敷兩面端疊一枚爲證誠座最中間敷同緣疊二枚爲唄師座。

³⁰² See note 262 under Kōryūji, and note 281. Reference to the *Jitōin* appears on p. 72 in *D-n-bukkyō-zensho*.

inventory of Kanzeonji in Tsukushi, dated 905, lists under its "Ordination Precinct," Kaidanin 戒壇院, a plank-roofed *raidō*, 50 by 16.5 *shaku*, accompanying a 50 by 15.5 *shaku* shingled main hall. Both of these buildings were slightly damaged in 861, and so must have been in existence before that date.³⁰³ No clear evidence carries the *raidō* back to the generation when esoteric Buddhism was first introduced to Japan, at the beginning of the ninth century; but its use under that name at least by the second quarter is unquestionable. Even before this, as we have seen, the architectural function of the *raidō* had been the subject of experiment, although the orthodox name was not yet in use.

This period of first adoption, already in full course by 850, was still one of strong Chinese influence on the Buddhist architecture of Japan. The character of the age, and the style of its remaining monuments, encourage the general assumption that any major architectural element appearing at the time—and not readily explained as a reversion to native preference, like the shingled roof—must have been an importation from China. It becomes a problem of great interest, therefore, to determine what evidence remains on the continent for the existence, in T'ang, of direct prototypes for the various forms taken by the Heian *raidō*.

RELATED DEVELOPMENTS IN CHINA:

Chinese material pertinent to the problem may be found in existing buildings and ruins; in paintings with architectural subject matter; and in written records of various sorts; and will be studied under these categories below.

The type of attached fore-hall which must have existed at Myōrakuji and Kanjūji in the tenth century, is extremely widespread among buildings in the official Ming-Ch'ing style of Peking. The form is substantially the same whether it is used in the residential quarters of a palace, in a Buddhist temple, or in a Taoist shrine. The fore-hall is usually two bays narrower than the main block behind it, and continues the latter's column axes; it is itself a large, open room without interior supports. It is normally enclosed by an open roof, framed with Ming-Ch'ing details: the twin ridge-poles and rounded gable (intersecting the slope of the main roof) which are characteristic of later Chinese design of secondary building elements. In one unusual building visible in Peking—a palace shrine to the God of Fire, the Ch'in-an-tien 欽安殿, on the major axis in the gardens of the Forbidden City—the same sort of room is provided by a version of the Japanese *mago-bisashi*. The roof there is a long extension of the eaves of the main block, and is framed inside on long transverse girders, which slant upward as they go in; the whole fore-hall is the same length as the rest.

The Expeditions of the Society for Research in Chinese Architecture, carried out in recent years in the North, have shown that these and other forms of similar purpose exist outside of the environs of Peking, and from periods earlier than Ch'ing, though they are rather rare phenomena among preserved remains.³⁰⁴ In a trip through the valley of the upper Fèn river in Shansi, Mr. and Mrs. Liang Ssü-ch'eng located a fore-hall of different

³⁰³ *D-n-bukkyō-zensho*, *Jishi-sōsho*, i, pp. 134-5.

³⁰⁴ *Shêng-mu-miao*: "A Brief Report of a Preliminary Investigation of the Ancient Architecture of the

proportions from the Peking standard, elongated in the transverse sense and covered by a hip-and-gable roof with a transverse ridge. This complex, the Shêng-mu-miao 聖母廟 at K'ai-cha-chên in Wên-shui-hsien 文水縣開柵鎮, is dated by them Ming or more probably Yüan. At Chêng-ting-hsien in Hopei, the Buddhist Lung-hsing-ssü contains three buildings, probably of Northern Sung date, in which the fore-hall problem is variously met. The axial Mo-ni-tien 摩尼殿 has a square core; from its four faces emerge four vestibules like that of the Shêng-mu-miao, each roofed in a transverse sense, so that the whole ground-plan becomes a cross (fig. 94). Two high pavilions stand balanced nearby, the *sūtra* repository Ch'uan-lun-tsang-tien 轉輪藏殿 and the Tzū-shih-ko 慈氏閣; each has a porch fore-hall on the front, covered by a penthouse extension of the lower eaves. The same type of penthouse, a sort of Chinese *magobisashi*, appears across the front of a Taoist shrine in west Hopei, the main hall of Ta-tao-kuan 大道觀 in Ting-hsien 定縣, dated Ming or later by Mr. Liu Tun-tsêng.³⁰⁴

Free-standing fore-halls have been discovered in the Fên valley in Shansi. That of the Lung-t'ien-miao 龍天廟 shrine in Yü-tao-ho, Fêng-yang-hsien 汾陽縣峪道河, consists of a sort of gate-house, three bays by one and walled in at the sides only, which stands a few feet in front of the sanctuary. Its title is Hsien-shih-p'êng 獻食棚, "shelf for food offerings." The present complex dates from the Ch'ien-lung period; but the stele which records its rebuilding at that time states also that its predecessor had borne an inscription dating its erection in 1347, in place of a still earlier one. This Yüan building, according to the stele, had also a Hsien-shih-p'êng, but of a single bay only instead of the present three.³⁰⁵

The most interesting development of the Chinese *raidō*, as shown by the society's expeditions, involves a three-part complex: the main hall, a fore-hall a short distance away, and a closed passage between, with a separate roof for each part. At An-p'ing-hsien 安平縣 in west Hopei, there is a shrine of this type, Shêng-ku-miao 聖姑廟, erected in 1309. Front and rear blocks are three by three oblongs, approximately the same size. The intermediate portion has the same dimension east to west as the others have north to south, so that the roofs are of equal size and height, a transverse ridge between two longitudinal ones (fig. 92). At Chêng-chou 鄭州 in Honan, there is a small Li-pai-ssü 禮拜寺 of indeterminate date, in which the fore-hall, as the largest element, is covered by a hip-and-gable roof; while the intermediate section has a rounded gable running in the same sense, and the sanctuary terminates in a steep pyramid. The most complicated example is that of the Taoist Huo-hsing-shêng-mu-miao 火星聖母廟 in the Fên river valley at Ho-hsien 霍縣. Here the fore-hall is crowned by crossing gables, extends in wings on either side, and is linked to the sanctuary verandah by a short passage (fig. 93). The discoverers speak of

Upper Fên River Valley" (in Chinese), *Bull. of Soc. for Research in Chinese Archit.*, v/3, March, 1935, pp. 24-5, fig. plate v.

Lung-hsing-ssü: "The Ancient Architecture of Chêng-ting-hsien, a Preliminary Report," *Bull.*, iv/2, Sept. 1933, pp. 14 ff.

Ta-tao-kuan: "A Brief Report of a Preliminary Investigation of the Ancient Architecture of the Western Section of Hopei Province," *Bull.*, v/4, June 1935, pp. 40-41, fig. pl. 22.

³⁰⁵ Lung-t'ien-miao: "Fên River," pp. 13-18, fig. pl. 1.

this building as "not old," but praise the ingenuity of its roofing as being beyond the capacity of the official Ch'ing style of Peking.³⁰⁶

Such three-part complexes in China seem unquestionably the distant cousins of the design used for the hall of the Juntei Kannon in upper Daigoji. Beyond their emphasized variety of roof lines, they differ principally in the fact that each is a compact group, and that the short intermediate element is walled in, instead of being a long open corridor. On the other hand, similarity is immediately obvious in the case of a later Japanese design which was popular in the Momoyama and Edo periods, the so-called *Gongen-zukuri* 権現造. This last will be studied in a later chapter, in connection with its first appearance in Japan in a Zen monastery of the fourteenth century, Eihōji 永保寺.³⁰⁷ Here it seems pertinent to remark merely that the *Gongen-zukuri* type is practically identical to a simple Chinese tripartite scheme like that of the Shêng-ku-miao, having the same general proportions, the same combination of roofs, and the same enclosed intermediate element (figs. 92, 131); and since it is linked historically to the Zen sect in Japan, where Chinese influence was paramount, there can hardly be any doubt that it originated on the continent.

It is equally reasonable to assume a generic relationship between both types of tripartite design in the Far East, the compact form known in Japan as the *Gongen-zukuri* and the looser combination used in the Heian Junteidō at Daigoji. The latter form, two major buildings linked by a comparatively long corridor, is easier to imagine and to construct, and hence was probably the earlier in historic evolution. Here also there is a close kinship between Japanese and Chinese versions. The Junteidō scheme has an impressive Ch'ing dynasty cousin at Peking in the Taoist "Shrine of the Eastern Peak," Tung-yüeh-miao 東嶽廟. The latter's scale is more monumental than the Japanese; and so both major buildings are icon halls, each with a narrower *raidō* attached to its front. In Taoist use this combination may be traced back at least as far as the Tartar Chin dynasty; in the "Shrine of the Central Peak," Chung-yüeh-miao 中嶽廟, at Têng-fêng-hsien 登封縣 in Honan, there is a stele in pictorial form, recording rebuilding operations in 1200, which shows the same sort of axial corridor linking two main halls at the rear of the precincts. Mr. Liu Tun-tsêng, in discussing the Taoist tripartite design, makes the (always reasonable) assumption that it originated in the Chinese palace; and proves by a text that it was used in the Northern Sung Forbidden City at K'ai-fêng.³⁰⁸ At this point the search jumps back to Japan, for Japanese accounts show that the same sort of combination was frequently adopted in the Imperial palace of the Heian period, in its most official (and hence most obstinately Chinese) sections.³⁰⁹ The two buildings there tied together were always

³⁰⁶ Shêng-ku-miao: "Western Hopei," pp. 34-37, fig. pl. 19.

³⁰⁷ Li-pai-ssü: "The Ancient Architecture of K'ai-fêng and Chêng-chou, Travel Notes," *Bull.*, vi/3, Sept. 1936, p. 15, fig. pl. 14.

³⁰⁸ Huo-hsing-shêng-mu-miao: "Fên River," pp. 36-37, fig. pl. 12.

³⁰⁹ See below, pp. 230 ff.

³¹⁰ Liu Tun-tsêng, "The Ancient Architecture of Northern Hopei" (sic, should read Honan), *Bull.*, vi/4, June 1937, pp. 86 ff.

³¹¹ Ponsonby Fane, *Kyōto*, pp. 37 ff. and fig. 6 (between the Daigokuden and the Imperial retiring-place Shoanden 小安殿 at its rear); pp. 41-43 and fig. 7 (in the Chūwain 中和院 or place for Imperial worship, between its main hall, Shingaden 神嘉殿, and the "north hall," Kitadono); pp. 53-54 and fig. 9

major halls, so that from the standpoint of human use the Heian palace examples are closer to the Taoist in China than to the Junteidō, with its simpler system of hall, corridor, and *raidō*. The difference, however, seems to me architecturally unimportant.

A formal and axial Heian palace design, by an axiom of historic evolution, should derive from T'ang. Here archaeology adds a crucial piece of information. The T'ang palaces have been swept away beyond any sort of recall; and so far as I have been able to find out, even descriptions are hopelessly vague for that all-important period. Outside of China proper, however, the Japanese have been able to excavate a royal palace of T'ang date in Manchukuo, at Tung-ching-ch'êng, Ning-an-hsien 寧安縣東京城. Its builders served the kingdom of P'o-hai 渤海, a close ally of the Chinese empire from 700 until the Khitan conquest of the early tenth century. There is every reason to suppose that the architectural forms they used were as purely Chinese as for example those which can be seen today in the Manchu palace at Mukden; they may very well have stood in the same sort of provincial relationship to the fashions of the Imperial court. The limiting dates are certain. It is highly gratifying to find, therefore, that in the succession of buildings and courts spaced along the central axis of the palace from front to rear, the fourth and fifth major halls were joined by a long axial corridor one bay wide: the oldest tripartite combination so far identified. By an equally happy chance, the P'o-hai ruins include the remains of a royal garden, complete with artificial lake and hill; and there, in a part of the palace where a relative informality was permissible, are the column bases of a hall fronting the water, which must have looked a good deal like the Byōdōin "Phoenix Hall"—with colonnades running out from each end to terminate in small pavilions—and which in addition possessed a small fore-hall attached to its front, three bays wide as against its own seven (fig. 95).³¹⁰ This is the earliest visible example of the attached fore-hall (doubtless with its own small roof) which I know in the Far East; a certain ancestor of the type which is familiar in modern Peking, and an eminently possible great-uncle of the Heian design used at Myōrakuji.

I have dealt in detail with all these aberrations from the Chinese norm because they show the variety, ingenuity, and considerable antiquity of continental attempts to circumvent the rigidity of the symmetrical hall plan. Five different solutions have been described: three variants of the attached fore-hall, with differing roof forms; the three-part complex; and the wholly isolated fore-hall. The rather scanty evidence of their use which is furnished by existing buildings or recognizable ruins, may be considerably widened by research in another field, that of painting. One of the oldest and most conservative categories of pictorial art in China has been the representation of architecture—usually palace buildings—in a landscape setting. Many pictures of this sort were preserved in the former Palace Collection in Peking, with attributions ranging back as far as the T'ang dynasty. It is true that the date of almost every Chinese painting is in some degree questionable; and that the value of even the most authentic as source material for architectural history

(in the offices of the Prime Minister, Dajōkan, between the main hall, Shōchō 正廳 and the "rear hall," Gōdō). Cf. also in *Kokushi-daijiten* under Daigokuden and Dajōkan.

³¹⁰ Cf. *Archaeologia Orientalis*, series A vol. v, "Report on the Excavation of the Site of the Capital of P'o-hai," Tōkyō, 1929, figs. 13, 25, 26, maps D, E.

can hardly be accepted in the same degree as less imaginative records. At the same time, any careful study of the best of these architectural paintings will reveal a good deal of valuable information. Their makers seem to have been scrupulously accurate in detail, to conform to a high standard of realism. The Sung critic Kuo Jo-hsü 郭若虛 includes a revealing anecdote in his history of painting, *T'u Hua Chien Wên Chih* 圖畫見聞誌 (ii): that a tenth century prince of the state of Shu called in his head architect to criticize a picture done for him by Chao Chung-i 趙忠義, and learned thereby that it was technically faultless. The accuracy demanded of the craft, furthermore, seems to have involved not only a thorough acquaintance with contemporary buildings, but a historic sense for past styles as well. I have found no text to corroborate this presumption; but treatises on painting frequently stress the same sort of antiquarian realism in styles of dress, and at least a partial proof is afforded by the paintings themselves. Even pictures in the Palace Museum in Peking which to an unsympathetic eye are obviously not the Sung or Yüan originals they pretend to be, are clearly not representations of Ming or Ch'ing architecture, but show an earlier style whose forms had been preserved for centuries as part of an archaistic atelier tradition. A picture in the collection attributed to Li Chao-tao 李昭道 of T'ang—unfortunately too small and dim to reproduce here—may well be neither T'ang nor even Sung in actual date. But its visible details are in a style which might very plausibly be carried back to late T'ang, with large-scale, widely spaced bracketing, and a simple platform design quite unlike the elaborate moulded and sculptured form which became fashionable in Sung. With historic verisimilitude carried so far, there is at least a good chance that the painter was equally faithful to his (real or assumed) period in making his palace building a complex of three contiguous blocks, covered by parallel roofs running into each other.³¹¹

Another picture in the Palace Collection, attributed to Li Jung-chin 李容瑾 of Yüan, brings together in one scene almost all the strategems which could be used to break through the symmetry of the Chinese monumental plan (fig. 100).³¹² Here the main two-storeyed building has a lower vestibule, with its own roof, emerging from each of its four sides. Elsewhere there are two halls joined by a short enclosed passage. In the fore-court at the bottom, the main complex—with the position of a lecture hall at the rear of temple cloisters—is a long block, with a narrower but higher fore-hall attached to its front. At the center of the court is an open, one-storey pavilion, which is joined to the fore-hall by an axial portico. Perhaps the elaboration of such grouping exceeds that of any work actually constructed, for nothing more than remotely comparable exists today. It must be remembered, however, that the achievements of the Ch'ing dynasty official style are a poor index of the potentialities of Chinese architecture in earlier, more creative periods. Precisely the ingenuity and complication characteristic of palace paintings like those of Li Jung-chin may be seen today, if not in the interrelationship of many building elements, at least in the bracketing of the Sung period—in the most important side of the Chinese structural system. Ingenuity and complication are patently absent both from Ch'ing bracketing and from the design of buildings in the present Forbidden City.

³¹¹ *Ku Kung Shu Hua Chi* 古宮書畫集, xxxii (albums of reproductions published by the Old Palace Museum, Peking).

³¹² *Ibid.*, xxxvii.

The corroborative textual evidence which might be used to widen our knowledge still further, is difficult to assemble because of the confusing changes which have been made in Chinese architectural terminology. The very wide vocabulary of technical terms which was needed to define the complex forms of Sung is so peculiar to that period as to be of almost no use in dealing with even closely related forms in Ch'ing; the change in nomenclature between the two periods was almost complete. There was one series of terms used under the Chou; in Han literature many of them have already been altered, and after the Han they may change again. The standard type of attached fore-hall in Peking, for example, bears the Ch'ing name *pao hsia* 抱廈, "attached porch"; I have not found this in any earlier records. What was very probably the same element in the Southern Sung palace was then called *yen wu* 簷屋, "eaves apartment."²¹³ Chief interest attaches to the term used—I am sure—for the same form in Yüan records, *hsien* 軒. Within the Forbidden City of the Mongol dynasty (erected of course within the strict framework of Chinese tradition), a number of lesser halls possessed *hsien* on front and rear, or on front alone. One of these, for example:

"The Wên-tê tien 文德殿 in the northeast corner of the palace enclosure—also called the "cedar-wood hall," because of the material of which it was made—was a building of three bays, with single bay *hsien* on front and rear. . . ."²¹⁴

Another combination comprised: a hall of five bays, with a *hsien* of three on the front; a colonnaded corridor of two bays; and a building for living quarters of three. The latter, by immemorial Chinese custom, must have been at the rear of the compound, and here doubtless was linked to the hall in front by the short corridor, running on axis. The scheme was thus a version of our familiar three-part complex, in this case elaborated by the addition of a fore-hall to one of the members.

The term *hsien* has had a variety of meanings in China.²¹⁵ The standard use of the

²¹³ *Sung Shih* cliv, *Yü Fu Chih* 輿服志 vi. In 1181 two minor halls, called collectively the Yen-ho-tien 延和殿, were remodelled in the Hang-chou palace. "Each building was five bays (long) and twelve rafter-lengths (i. e. six bays) deep, 60 by 84 feet. On the south side of the hall was an 'eaves apartment,' *yen wu* 簷屋 three bays long and 15 feet square. The two 'ear halls' 朵殿 (i. e. wings) were each two bays (long). East and west corridors were 20 bays each, the south corridor nine bays. In the latter there was a gate building three bays by six rafter-lengths, 30 by 46 feet."

In the early terminology of Japanese Buddhist architecture, derived unquestionably from T'ang China, the phrase "eaves corridor" 軒廊 is used to denote the short connecting galleries which in a layout like that of Tōdaiji lead to each end of the Buddha hall from the cloister limits. (軒, called *noki*, means for the Japanese only "eaves," and hence is equivalent to 簷). The term probably refers to the fact that such corridors run up to stop against the colonnade underneath the main eaves. In the same way, the Sung "eaves apartment" suggests a low, attached fore-hall, partly overhung by the main roof.

²¹⁴ *Chuo Keng Lu* 輟耕錄, xxi, dated 1366; as quoted in *T'u Shu Chi Ch'eng*, xxxii, *K'ao Kung Tien* 43, *Kung Tien Pu* 宮殿部 5/19.

²¹⁵ The various early meanings given to *hsien* have been discussed by Liu Tun-tseng in his article on the Han palace, "Ta Chuang Shih Notes," in *Bull. of Soc. for Research in Chinese Archit.*, iii/3, pp. 163-164. Among late sources, the Han meaning seems best preserved in the definition given by the Ming scholar Chang Tzū-lieh 張自烈 in his *Chêng Tzū Tung* 正字通: "Hsien are eaves, *yen*, especially raised in front of the hall, with curving rafters and no ridge-pole" (i. e. no true ridge-pole at the apex of the gable, the fore-hall roof being curved in Ming-Ch'ing style). 殿堂前檐特起曲椽無中梁者.

character in classical Chinese was to describe a projecting hood at the front of a chariot. Both this nomenclature and a version of the member itself have been preserved in one type of court carriage in Japan; adopted probably from a Chinese model of Sui or T'ang, and used thereafter with only minor modifications. I believe that in the period of expansive development of Chinese architecture, from late Chou through the Western Han, the meaning of the word was widened to denote a generally similar element in building practise: at first, perhaps, only an additional roof, analogous to the chariot hood, which may have been used to give a more effective shelter over the entrance to the hall; and then later an evolution of the form into some sort of enclosed vestibule. The nature of the development can be discussed only in hypothetical terms. None of the many literary references to *hsien* in Chinese architectural descriptions of Han or later dynasties gives any clear idea of its appearance. The conflicting explanations of later commentators (who as a class seem to have had no very precise knowledge about the details of architecture) only add confusion. The word seems to have lost what clarity of meaning it had, in the centuries after the Han, until it came to be no more than a highflown way of referring to a scholar's study. The quite precise reference in the description of the Yüan palace, I should explain as a deliberate archaism, used for its literary flavor in place of more modern equivalents like the *Sung yen wu*.

Various quotations lend substance to this theory. As to the *hsien* of the Western Han palace, the *Ch'ien Han Shu* records:²¹⁶

"Emperor Yüan would remain to enjoy the music. Sometimes drums would be set out beneath the hall. The Son of Heaven, from the 'overlooking *hsien*' 臨軒 above the balustrade, would give out bronze rings with which to strike the drums."

When it was used for such informal purposes, the Han *hsien* was spoken of as the "non-august seat" 不御座 or the "august throne of ease" 御平臺 of the Son of Heaven, in contrast to the ceremonial throne in the hall proper.²¹⁷ In the Six Dynasties period, according to the *Spring and Autumn Annals of the Sixteen Kingdoms*:

"(Among the) buildings of the Ta-ch'i palace of Shih Hu (of the Posterior Chao), was the 'overlooking *hsien* building' on the south face of the Chêng-hui hall; in which were provided a couch of white jade and tasseled curtains. . . ." ²¹⁸

Hsien in these early centuries might be described as being "high, in order to look down on the hills" 高軒以臨山; or "two-storeyed" 重; or "surrounding" 周 (when they rose on all four sides of the main building, presumably).²¹⁹

All of these qualities are fulfilled in the complex architecture of Chinese paintings. It is reasonable to suppose, therefore, that the great variety of combinations of form seen

²¹⁶ *Ch'ien Han Shu*, lxxxii, biography of Shih Tan 史丹. 元帝留好音樂或置鼙鼓殿下天子自臨軒檻上墮銅丸以隨鼓.

²¹⁷ Cf. Liu, *op. cit.*, and Tzu Yüan under *lin hsien* 臨軒.

²¹⁸ *Shih Liu Kuo Ch'un Ch'iu* 十六國春秋, section on the Posterior Chao. 石虎大啓宮殿於正會殿南面臨軒殿上施白玉牀流蘇帳.

²¹⁹ Selected from the *P'ei Wen Yün Fu*. "High" from the "*Fu* of the Capital of Shu" 蜀都賦 by Tso Ssü 左思 of Chin; "two-storeyed" from the "*Fu* of the Western Capital" by Pan Ku of Han; "surrounding" from the "*Fu* of the Wei Capital" by Tso Ssü.

in Sung and Yüan palace views may be carried back, in their essential principles, to Han; the thesis standing as one further instance of the extraordinary basic conservatism of Chinese architecture.

Such textual evidence, of course, applies literally only to secular domestic building. The distinction between palace and temple in the Far East is notoriously slight, however; and just as a standardized fore-hall is used in Peking today indifferently for palace, temple, or shrine, the forms seen in the palace paintings with their more distant prototypes must have been adapted in the Six Dynasties and T'ang for Buddhist and Taoist architecture. In at least one instance this close relationship can be proved; the same linking of major halls on the north-and-south axis by a corridor running between, which was a part of the design of the Northern Sung palace Wên-tê tien at K'an-fêng, was reproduced in 1200 in rebuilding the Taoist "Shrine of the Central Peak." Naturally the picturesque variety of pleasure palaces was applicable only in part to the more sober needs of religion. Naturally, also, it must have been limited, in Buddhist and Taoist use, to the more informal side of religious establishments. The main hall of a great monastery or shrine, like the Hall of State in the Imperial Palace of any dynasty (and like the "golden" hall of Hōjōji and its successors in Japan) remained an isolated structure, monumentally simple in the symmetry of its ground-plan and section. The vestibule in early religious architecture was doubtless applied to the sort of buildings in which it appears in Chinese remains today, dating from Yüan to Ch'ing, relatively small in scale and of secondary importance.

Unfortunately there is no textual evidence for the use of elements corresponding to the *raidō* in early Chinese Buddhist architecture, comparable to that which refers to the palace *hsien*. The detailed descriptions of architecture in Chinese literature are products first of contemporary amazement at the unprecedented richness and magnificence of Han palaces—and then of a self-conscious imitation of that amazement in later centuries, expended still on the palace as the one supremely worthy object of the poet's attention. Early Chinese Buddhist literature contains many panegyrics of temple buildings modelled on the classic Han prose-poems, or *fu*. Some of these provide valuable information (which usually deals, however, with the unusual decorations of a pagoda or *sūtra* repository, rather than with any larger elements of design). Often, also, the wording of Han originals is imitated with such pedantic exactness that the value of the passage is questionable except as an exercise in the rearrangement of set phrases. By the Sung dynasty, the achievements of architecture seem to have reached a degree of familiarity fatal even to pretended astonishment; from then on descriptions are rare and usually perfunctory.

Only a small number of references, therefore, testify to the presence in early Buddhist temples of plan combinations comparable (in more sober degree) to those of contemporary palaces. A stele of 752 in Yung-t'ai-ssū 永泰寺 on Mt. Sung 嵩山 in Honan lists, among other architectural equipment, "four-fold surrounding eaves buildings, *yen yü* 簷宇, and a double circuit of surrounding corridors."²²⁰ The combination there must have been a version of the "surrounding *hsien*" of earlier palaces, an appendage with its own roof on each side of the main building. Something of the same effect has been preserved in the

²²⁰ Quoted by Tokiwa and Sekino, *Buddhist Monuments*, ii, pp. 201 ff. 簷宇四繞廻廊復周。

Mo-ni-tien of Lung-hsing-ssü at Chêng-ting-hsien (fig. 94). Again, in a ninth century stele describing the altar of ordination of K'ai-yüan-ssü 開元寺 in Wei-chou 魏州, the phrase appears, "elongated *hsien* pierced by doors, like the soaring of the dragon, like the mounting of the phoenix"—similes indicating great height, after the manner of the Han fu.²²¹ A ninth century account of the Taoist K'ai-yüan-kuan 開元觀 in Jao-chou 饒州, finally, speaks of "giant halls, storeyed towers, enclosing *hsien*, and broad porches."²²²

The early existence of the *raidō* in China as an independent building rather than an appendage may be proved by textual evidence from several fields.

For the Buddhist, a stele of 1084 may be cited, describing the pagoda of Tung-lin-ssü 東林寺 on Mt. Lu 廬山 in Kiangsi; in front was an "offering chapel, furnished for Buddhist services."²²³ The same sort of design is mentioned by the eleventh century Japanese pilgrim Jōjin, whose use of the word *raidō* with reference to Chinese architecture has been quoted earlier. The monastery in this case was P'u-chao-wang-ssü 普照王寺 on the Huai River. The sanctuary was a great octagonal thirteen-storeyed pagoda, roofed with yellow tiles.²²⁴

"In front of the Buddha (enshrined within the pagoda) was a hall of worship, Li-tien 禮殿 with a separate roof. Inside this yellow tiled treasure hall were set up stands with offering utensils, impossible to imagine. . . ."

The plan solution thus described for eleventh century China must have borne a generic resemblance to the ninth century complex of Haiden and tomb pagoda in the Okunoin on Kōyasan. It must have been of the same general type, again, and have been used in the same general way as the sanctuary and "shelf for food offerings" of Yüan date in the Lung-t'ien-miao in Shansi.

The main shrine of Confucius in China, at Chü-fu in Shantung, in its existing, Ch'ing dynasty form, departs only in one respect from the universal tradition of monumental planning.²²⁵ There is the inevitable sequence of outer gateway and courtyard, inner gateway, main courtyard, main hall, and rear hall (in the nuclear compound). In front of the main hall and a short distance from the steps leading to its front terrace, is a small square building with openings on the four sides. This is called Hsing-t'an 杏壇, or "Apricot Altar-platform," to commemorate a place so named where Confucius is supposed to have rested on his travels. The reason for its presence is well known. Before the Sung dynasty, its site was occupied by the main hall of the shrine, marking the traditional position of a building in which Confucius himself had expounded the Classics. In the T'ien-hsi period of Northern Sung (1017-21), the shrine was restored by the descendant of Confucius in the 45th generation, and the main hall was removed to the rear. "Because they did not

²²¹ Quoted in *T'u Shu Chi Ch'êng*, xviii, *Shên I Tien* 神異典, 114: 張軒達戶如龍之蟠如鳳之驚.

²²² *Ibid.*, *Shên I Tien* 281, *Tao Kuan Pu I Wên* 道觀部藝文 1/9: 巨殿層樓廻軒廣廈.

²²³ Tokiwa and Sekino, *op. cit.*, ii, pp. 9 ff. 獻亭備陳佛事.

²²⁴ *D-n-bukkyō-zensho*, *Yūhōden-sōsho*, iii, p. 376. 佛面禮殿三間別棟.

²²⁵ Liang Ssü-ch'êng, "The Architecture of the Temple of Confucius, Chü-fu," *Bull. of Soc. for Research in Chinese Archit.*, vi/1, Sept. 1935, pp. 5 ff. (history), 42-44 (the Hsing-t'an). Record of restoration around 1020 quoted p. 7 from the *Chü-fu-hsien Chih*, xxiv; of first erection of Hsing-t'an from the *K'ung Shih Tsu Ting Kuang Chi* 孔氏祖庭廣記, a compilation of records of the shrine made in 1311.

wish to obliterate the ancient site of the hall of expounding, they took tiles and made an altar platform, about which they planted apricot trees." Thus the Hsing-t'an—which only later was made into a pavilion—fulfilled no real purpose in plan except that of a monument, and certainly was not created to serve as a detached *raidō*. To the south of it, however, there once stood a building called the Yü-san-tien 御贊殿, or "hall for Imperial praise-offering." This seems to have disappeared during the Ming, but its existence is noted on views of the precincts drawn under the Sung and Chin, and the annals of the district record its erection as part of a program of restoration around 1020. It seems to me proper to look on this lost hall as having fulfilled the function of a Confucian *raidō*, here especially designed for worship by the Emperor.²²⁵ Whether it existed before the Sung, or was a product of the marked enlargement of the Chū-fu shrine which took place from 960 on, under the first Sung rulers, seems to be unknown. I know of no parallel in other Confucian shrines in China, so far as existing architecture is concerned. In the capital of Korea, Keijō or Seoul, however, the royal Confucian shrine contains a small, open pavilion in front of its main hall, at the center of the front courtyard, which seems to exist there as a detached *raidō*. The buildings are comparatively modern, and the shrine itself goes back only to the beginning of the fifteenth century, when Seoul was made the capital by the first Li monarch.²²⁶ Particularly in regard to its Confucian culture, however, Korea seems to have been in certain respects more conservative even than China (as Japan has been in regard to Buddhism); so that it seems to me not improbable that the model for the existing Seoul compound was derived much earlier than the Li dynasty, from China of the Sung or before.

By the Sung dynasty, the convenience of the *raidō*, as a supplement to the unyielding formality of the monumental plan, led to its intrusion into even the most sacrosanct precincts of Chinese architecture. The periodic worship by the Emperor at the altars of Heaven, of Earth, of the Soil and of Grain, etc., had from time immemorial been conducted in the open air, on platforms of rigidly prescribed shapes and sizes. The altar compound might include buildings, like that in which the Emperor passed a night of fasting before the ceremony; but these by long tradition seem to have been kept subordinate to the main purpose of the enclosure. The Sung made the innovation of adding a so-called "hall for worship at a distance," Wang-chi-tien 望祭殿, within which the main ceremony might be performed in case of bad weather. Under the Northern Sung this was a building of five bays with a tiled roof. Under the Southern Sung—partly perhaps for economy, partly as a sort of antiquarian return to primitive forms—the same function was performed by a "reed hall" 葦殿 with a thatched roof.²²⁷ Here a deliberate archaism must have produced

²²⁵ *Resumé of history of the Seoul shrine in the Chōsen vol., p. 39, of Nihon-chiri-taikei 日本地理大系* (Tōkyō, 1930); which may be checked by the modern compilation of Korean records, *Chōsen-shi* (Keijō, 19—) from which are taken page references below. Established by the Li dynasty founder, T'aejo 太祖 in 1398 with the name Sōnggyun'gwan 成均館 (iv, 194). Main hall burned under his successor, Chōngjong 定宗, in 1400 (p. 249). Rebuilt under the next king, T'aejong 太宗, in 1407 (p. 430). Shrine burned by Hideyoshi's troops in 1591, rebuilt under Sōnjo 宣祖 in 1606-11.

²²⁷ *Sung Shih*, cliv, *Yü Fu Chih* 6. Account of the Ming controversy discussed in detail by Shan Shih-yüan 單士元 in "Source Materials for the Historical Study of the Archit. of the Ming Dynasty," *Bull. of Soc. for Research in Chinese Archit.*, v/2, Dec. 1934, pp. 122-123.

a building quite like the early Japanese *raidō* or "temporary *hisashi*," as used, for example, at the dedication of Kanjūji.

Provision for an indoor ceremonial was continued under the Yüan. At the beginning of the Ming, the problem was raised by the Emperor Hung Wu, and was debated by his advisers, one faction citing the precedent of the preceding dynasties, the other condemning the innovation as a violation of ancient traditions. The Imperial desire for greater comfort seems to have settled the argument, for in the end one compound at least, that of the Altars of the Soil and of Grain, was modernized. North of the twin altars was set up a five bay "hall for worship at a distance," and beyond this, to the north, a Pai-tien "hall of worship," also of five bays.³²⁷ Both must have had the function of *raidō*, and I suppose were distinguished by the ranks of their users.

Pai-tien is of course the Chinese version of the Japanese Haiden, the name always used to denote the public portion of the Shintō shrine complex. The characters seem to be comparatively rare in Chinese use, and are difficult to trace through the fluctuating architectural terminology of the continent. A not too distant cousin of the Imperial Pai-tien in Peking, however, exists at Chi-yüan-hsien 濟源縣 in Honan; where the shrine serving the state cult of mountains and rivers, Chi-tu-miao 濟瀆廟, possesses a detached building with the same title in front of its main hall. Its exceptional details are in some respects late, and in others recall strongly the Northern Sung style, so that it seems a re-erection of an original of that period.³²⁸ In the same district, the shrine of the God of War received a Pai-tien in restorations of 1745.³²⁹ The name Haiden has been in use in Shintō at least since the eighth century. But it would be very surprising if the Japanese invented the phrase for themselves; the element which it describes certainly played no part in primitive Shintō; and the supposition seems to me reasonable that both name and architectural form entered Japan from China fairly late, at a period of close contact, i. e. in the seventh or eighth centuries. Thus there are grounds for supposing that the detached Pai-tien sporadically recorded in Ming and Ch'ing are only the late descendants of a type already existing in T'ang or earlier—normally not mentioned in texts of the time because of its unpretentiousness in size and decoration. The fact that one remaining example is associated with the ancient official worship of mountains and rivers, and another at Peking with the Altars of the Soil and Grain (for the existing Ch'ing layout reproduces its early Ming predecessor, though with altered names), may furnish an additional link with the Japanese Haiden. Early Shintō was also an official religion of nature divinities. If we suppose a period, in the seventh or eight centuries, when its immemorial forms were expanded and altered by the pressure of Chinese influence, no alien prototype for the modernized Shintō shrine complex would have been more appropriate than that which served the generally similar nature cult of China. It is true that the Ming scholars employed by Hung Wu to justify his desire for comfort could find no precedent for the *raidō* idea in Imperial rites earlier than Sung; but the practise may still have been prevalent in earlier times in humbler, and less rigidly standardized levels of the official cult, like the Honan shrine of mountains and rivers.

³²⁸ Cf. Liu Tun-tsêng, "Northern Honan," *Bull.*, vi/4, pp. 64-68.

³²⁹ *Chi-yüan-hsien Chih*, vi, section on official cults 祀典.

The essential idea of the detached *raidō*—a building for the performance of acts of worship which for one reason or another must be separated from their object—perhaps existed first of all in connection with still another architectural problem, the tomb. The elaborate Imperial mausoleum of recent dynasties typically contains a hall—usually its largest, as in the case of the tomb of Yung Lo of Ming—for periodic offerings to the spirit of the deceased ruler.²²⁰ This is necessarily located some distance in front of the tomb mound proper; its name has varied through a wide range of poetic titles, but in the mausoleum of T'ang T'ai Tsung, at least, it was called simply an "offering hall," Hsien-tien 獻殿. The practise may be traced back unquestionably as far as Han, when not only the Imperial mausoleum complexes, but also the tombs of private individuals were provided chapels; then typically called Ssü-t'ang 祠堂, and placed some distance in front of the subterranean grave chamber. There are many references to these buildings in Han texts, and even preserved examples: notably the still intact chapel on Hsiao-t'ang-shan 孝堂山 in Shantung, and the wall slabs from similar small erections serving the tombs of the Wu family, all important monuments also for the development of Chinese figure drawing.²²¹

The Japanese pilgrim Jōjin, in his description of eleventh century monasteries in China, uses the term *raidō* once more to record a ceremony held at Lung-hua-pao-chêng-ssū 龍華寶乘寺 in the vicinity of Hang-chou. The account begins with the Great Buddha hall, its magnificent decorations, its golden utensils, etc., and then states:

"In the *raidō* were set out chairs and tables for food. The assembled monks stood in line (s?) on left and right in front of the Buddha. Masters (with the right to wear) purple presided at the thrones. One priest, holding a censer, recited the explanation of the ceremony's purpose; thereupon the monks, standing in line, clashed cymbals. Next they went to their seats at the dining tables."²²²

From this description, the *raidō* seems to have been here directly adjacent to the space around the chancel used for services. Possibly it took the form of an attached fore-hall, like those common in Chinese religious use today. On the other hand, the whole building—called a "Great Buddha hall," like that at Tōdaiji—must have been a very large one, of the monumental type which is usually symmetrical at least in exterior appearance, without picturesque appendages of any sort. The provision of an area corresponding to the Japanese *raidō* within the symmetrical silhouette of the main hall itself, was entirely within the repertory of eleventh century Chinese architecture. As we have

²²⁰ Summary of Imperial mausoleum designs by Liu Tun-tsêng in "Ch'ang-ling, the Tomb of Emperor Yung-lo of the Ming Dynasty," *Bull.*, iv/2, Sept. 1933, pp. 54-55. For Han practise, cf. Chavannes, *Mission*, 1/1, pp. 7 ff.; and Ōmura 大村, *Shina-bijitsushi, Chōchōhen* 雕塑篇, pp. 40 ff.

²²¹ *D-n-bukkyō-zensho, Yūhōden-sōsho*, iii, p. 327. 禮堂立寄子食床僧侶竝居佛面左右賜紫大師等爲首各座次... 有一僧執香爐啓白次諸僧竝立打鈸十口許次著食座. The portion which I have omitted runs, "Next we worshipped at the Precinct of the 500 Lohan, and after that at the Precinct of Kuan-yin, and then at that of Subhūti. The congregation performed the ceremony of burning incense. Silk was spread out in front of the Buddha." At least the first part of this seems an intrusion from another section; in fact the alternative version of Jōjin's record (in *ibid.*, iv, p. 26) describes the ceremony in the Great Buddha hall and the maigre feast which followed (though without mentioning the *raidō* by name), and then goes on to tell of visiting the other precincts in turn; this is clearly the correct sequence, but I have chosen to quote the slightly garbled version for its narrative details.

seen in the previous chapter, the larger halls of the north, dating from Liao and Chin, may possess an open area on the south which is wider than the front aisle, separated by columns from the chancel.³²² In the San-ta-shih-tien of Kuang-chi-ssü, and in the main hall or Ta-hsiung-pao-tien of Hua-yen-ssü, the effect has been achieved by shifting the columns which enclose the front aisle a half bay to the rear (fig. 35). In the main halls of Fêng-kuo-ssü and Shan-hua-ssü, these columns have been omitted entirely (fig. 34). By either scheme, an asymmetrical division of space exists in the lower portion of the hall; but above the main girders, which span these wide intervals, symmetry is restored in the framing of the roof. In the Ta-hsiung-pao-tien of Hua-yen-ssü, where front and central areas are separated by heavy curtains, the effect is like that of the mature esoteric interiors of Kamakura, with their division by latticing into *naijin* and *raidō*. It seems to me likely that the *raidō* mentioned by Jōjin, in a hall which must have been of similar size to those remaining from Liao and Chin in the north, was designed in the same way, and also gained its sense of separation from the chancel by curtains. To judge from a reference given in the diary *Sarashina-nikki* 更級日記, curtains were also used in Heian Japan to screen the chancel, either as an alternative to the later orthodox lattice or as an earlier form.³²³

The Chinese evidence given above may be summarized as follows. The extra front aisle, comparable to the Japanese *magobisashi*, is rare among existing remains, but may be carried back by these as far as the (doubtless) Sung pavilions of Lung-hsing-ssü. The isolated fore-building, also infrequent today, was popular under the Sung, and at least in tomb design may be carried back to Han. The attached vestibule may have existed in secular architecture as early as Han; a ruined version of the form appears in the P'o-hai palace of the T'ang period; and it seems likely that under the name of *hsien* the idea was taken over from secular building practise in the early centuries of Chinese Buddhism. The sporadic appearance of these Chinese parallels to the *raidō* must be due in part to the accidents of preservation, the same factor which has obliterated almost all evidence of plan development in Heian buildings. So far as written records are concerned, the difficulty of tracing them may be explainable; partly on the ground that their very simplicity caused their omission from descriptions of palace and temple architecture which dealt chiefly with size and magnificence; and partly by the vagueness and fluctuations of Chinese architectural terminology. At any rate the probability has been established that the religious architecture of T'ang was capable of the sort of plan combinations which were used in Heian Japan, under the stimulus of new forms of Buddhism imported from China. There are strong grounds for believing then, that the source of the Japanese *raidō*—and ultimately that of the standard, peculiarly Japanese hall plan of Kamakura—was Chinese.

A postscript to the Chinese evidence may have some negative value. The *raidō* idea

³²² See above, p. 86.

³²³ The *Sarashina-nikki* covers events in the life of its authoress, an unknown minor Fujiwara lady, during the 2nd quarter of the 11th century. Once in a dream she saw a priest, who rebuked her for lack of attention to religious matters. He was standing "within the chancel barrier by the august curtains" 御帳のかたの犬防の, "and then went away, entering within the curtains" 内に御帳の内に入りぬ (edition of Asada Shoten, Kyōto, 1931, pp. 207-8).

may have originated in China; but in contrast to its luxuriant flowering in Japan, it has always had to struggle for existence on the mainland, and has everywhere been checked by the stronger Chinese tradition of monumentality. Its absence from the more formal strata of Chinese architecture is as much a general rule as its presence in the corresponding buildings in Japan (at least from the Kamakura period on). Monumental Chinese architecture has thus deliberately deprived itself of a major convenience. The problems created by human use have of course remained. Where the Chinese have refused to solve them inside their buildings, the earlier way has persisted of solving them outside, in the impressive tradition of the courtyard audience. Probably by way of compromise between the two extremes of formality and practicality, the practise has grown up in China at least from Sung times of enlarging the terrace at the front of the hall; so as to accommodate at least at the level of the interior the crowds of worshippers or officials who are forbidden the comfort of a *raidō* roof. This so-called "moon terrace" 月臺 is already a standard feature in Liao buildings (fig. 30). It is entirely absent in Japan, where the need for such a compromise did not exist.

RELATIONSHIP TO DOMESTIC ARCHITECTURE:

The problem of a possible influence from domestic architecture on the adoption of the *raidō* in Japan seems to me to lead, more obscurely, to the same result.

Picture scrolls from the twelfth century on frequently show palaces and mansions in which the main chamber, *moya*, reserved for the lord, has in front a *hisashi* considerably wider than the normal "aisle," which is used by subordinates waiting on his commands.³²⁴ The parallel here to the temple's *naijin* and *raidō-gaijin* is obvious, and is made even more insistent by similarity of architectural treatment; both palace *hisashi* and temple *raidō* usually open all across the front, with grilled shutters hung from the top, while normal, hinged, solid doors are set at the ends (fig. 99). Plan similarity made it possible for the Heian palace or mansion to be used for Buddhist services as if it were a temple hall. Sei Shōnagon in her "Pillow Book" describes such a ceremony held at the Koshirakawa mansion of a high Fujiwara dignity, the *Kechien no Hakkō* or "eight expositions (directed toward) forming a relationship (with the Buddha Way)":

"The bamboo screens of the *hisashi* had been rolled up high, and the great officials, facing toward the interior, were pleased to sit in long lines above the sill (i. e., within the room). Below (i. e. outside on the verandah), the courtiers and young lords, to whom seats had not been assigned, were standing about here and there amusing themselves. . . ." ³²⁵ Presumably the *moya* of the mansion had been transformed by ecclesiastical furniture into a sanctuary for the occasion.

³²⁴ E. g. in the existing copies of the 12th century *Nenjū-gyōji* (cf. *Nihon-emakimono-shūsei*, xii, pls. 2, 11, 34, 36, 51-2; xiii, 5; xiv, 4, 21-2, etc.) or in the 12th century *Ban-dainagon-ekotoba* 伴大納言繪詞 (do., i, pl. 18); these showing the Imperial Shishinden 紫宸殿, Ninjūden 仁壽殿, Seiryōden 清涼殿, and Shinden 寢殿.

³²⁵ *Makura-no-sōshi* 枕草子; in the edition edited by Kaneko 金子, Tōkyō, 1929, p. 186. Cf. translation by A. Beaujard, *Notes de Chevet*, p. 40, 廂の御簾高くまき上げて長押のうへに上達部奥にむかひてながながと居給へりそのしもには殿上人ねかき君達かりそろぞく直衣などもいとをかしくて居もさだまらずこてかしてに立ちさまよひおそびたるも.

The development of domestic architecture during the Heian period is a subject about which very little is clearly known. It would be dangerous to assert that the spacious front *hisashi* of the Heian mansion antedated the Buddhist *raidō*, therefore. In fact, any such chronological comparison, based on a presumption that one must be the origin of the other, seems to me beside the point. Both were adopted as an improvement on the rigidity of the Chinese ambulatory scheme, for much the same reasons of convenience. Perhaps the earliest important Japanese use of such expanded *hisashi* was in the Imperial Shishinden, the Hall of State within the living quarters of the Emperor (in contrast to the completely public and monumental Daigokuden, in its own compound). This building was first erected in 794 for the new and strongly Sinophile Heian palace. Presumably its plan at that time (fig. 32) was standardized in its many later rebuildings, and has been preserved in the existing careful descriptions.³²⁶ Here the central *moya*, containing the canopied throne of the Emperor, was nine bays long. All along front and rear ran *hisashi* the same length and approximately 20 feet deep; in addition there were narrower *hisashi* of ten feet on east and west, off the *moya* only. The effect of this design, as reconstructed from textual evidence in the nineteenth century Shishinden now standing in Kyōto, is certainly quite unlike that of a Peking palace, and for that reason seems Japanese rather than Chinese. But the east and west *hisashi* are a feature which we have seen, under their Chinese name *hsiang*, in the palace descriptions of Han, and perhaps even in the An-yang ruins (fig. 31).³²⁷ Those on north and south make the Shishinden a close cousin to the hall forms described in the Sung and Yüan histories, where on front alone or both front and rear there were "eaves apartments," or *hsien*.³²⁸ I have tried to prove that in the Chinese halls these annexes were covered each by its own small roof, intersecting the main one. It seems to me by no means impossible that the Shishinden of the ninth century was roofed in the same way, with three parallel ridges—one each for front and rear *hisashi*, and a higher for the *moya* and end *hisashi* between—like the palace buildings in Sung paintings. The only alternative possible with such a ground-plan, for an architecture operating under the restraint of Chinese tradition—as Japanese palace building of the late eighth century must have been—would be a sort of double *magobisashi*, with eaves descending appreciably lower across the front and back than on the ends; a design made objectionable by its lack of monumentality.

The triple ridge form, if it was ever used, could have been no more permanently congenial to Japanese taste in the Heian palace than it was in temples like Myōrakuji. Our earliest evidence for the appearance of the Shishinden comes from picture scrolls of the twelfth century, when—perhaps by a radical departure from the original—it seems to have been covered by a single, large, cypress-shingled roof, designed to minimize the

³²⁶ Cf. the exhaustive study of the buildings of the Imperial palace made by the 18th century antiquarian Uramatsu Kozen 裏松固禪, "Daidairizū-kōshō" 大内裏圖考證, contained in the anthology *Kojitsu-sōsho* 故實叢書, Tōkyō, 1929; section on the Shishinden is ii, pp. 1 ff. Also Ponsonby Fane, *Kyōto*, pp. 63 ff. The textual evidence assembled by Uramatsu is extremely fragmentary for early centuries, precise details being given only in late works; so that there may be some question as to how exactly the original forms were preserved.

³²⁷ See above, pp. 8-9, 85.

³²⁸ See above, p. 184.

irregularity of the plan (as Kamakura temple roofs conceal all plan elaborations beneath them).³³⁹ The awkward re-entrant angles were taken care of by an inevitably awkward expedient, impossible to imagine in an originally Chinese design: a single post apiece, rising isolated from the ground to hold the corner eaves beam.

It is worth notice that in this earliest example the plan, though not strictly that of the chancel-and-ambulatory formula, is still symmetrical, with an almost completely useless *hisashi* at the rear quite as large as that in front used for ceremonial ranking of officials before the throne. This is of course good Chinese formalism, and quite appropriate to the date of first erection in the late eighth century.

Thus it is quite as likely in domestic architecture as in religious that the first encouragement to break away from the chancel-and-ambulatory scheme came from China—like the formula which it superseded. The early link was soon parted forever; so that even by mid Heian the palaces and mansions of Kyōto must have been far less like those of the contemporary Chinese capital than could have been the case in Buddhist architecture.

THE SINGLE-STOREYED PAGODA: TAHŌTŌ

The earliest preserved evidence of a new form of pagoda, introduced to Japan by the esoteric sects at the beginning of the ninth century, is given by paintings rather than by architecture. The great esoteric *Mandaras*, among their almost numberless symbols of the infinite aspects of deity, include one—of primary importance as a representation of Birushana Himself—which has the form of a single-storeyed pagoda, with a cylindrical shaft surmounted by a square, pyramidal roof and spire (fig. 102). By tradition, this had been the form of the mysterious Iron *Stūpa* in South India, from whose divine occupants the patriarch Nāgārjuna received the esoteric scriptures.³⁴⁰ Simplified and at smaller scale,

³³⁹ The *Nenjū-gyōji* shows the Shishinden of the 12th century with its roof removed (for illustrative purposes); but in the case of the Ninjūden, immediately to the rear with the same type of plan, it shows the reentrant corners covered each by a roof continuing the slope of the main one, but slightly lower (cf. *N-emak-shūsei*, xii, pls. 11, 23). These open corner porches in the Shishinden were called 隅庇, 隅小庇, or 階隠.

³⁴⁰ Cf. *Mikkyō-daijiten* under Nanten-tettō 南天鐵塔. The story appears in the *Kongōchōkyō-giketsu* 金剛頂經義訣, written down from the oral dictation of the patriarch Vajrabodhi by his pupil Amoghavajra.

"The *sūtras*, with their innumerable *gāthās*, were compressed (within a container) the width and length of a bed dais 牀, and 4 to 5 feet through, inside the Iron *Stūpa* in the realm of South India. For several centuries after the Buddha's Nirvana, there was no one who was able to open this *stūpa*, for it was sealed shut with iron doors and an iron chain. As the Law of Buddha was gradually waning in Central India, there appeared a priest of great virtue (Nāgārjuna). Once this priest made a vow to open the *stūpa*. Through seven days he went about it chanting, and then knocked upon its doors with seven white mustard seeds. Thereupon the doors opened. For a time he was unable to enter, because of all the divinities inside, leaping in their wrath; but he could look inside, and see incense burners from which light streamed out 10 or 20 feet, rare flowers, and jewelled canopies suspended to fill the interior; and he could hear the sound of voices chanting the praises of the king of *sūtras*. At last this priest of great virtue, with a heart truly penitent, swore a great oath; whereupon he was able to enter. After he had gone in, the *stūpa* closed again. For many days on end he chanted the king of *sūtras* (the *Kongōchōkyō*) in its extended version, once through (seeming no more than) the space of a meal-time; and from the various Buddhas and

it became a five-fold sequence of shapes, the Gorintō 五輪塔—square, circle, triangle, semi-circle, and circle again—emblematic of the Five Elements, the Virtues of the Bodhi-heart, the Forms of Wisdom of the Tathagata. As an architectural form, therefore, it embodied a rich doctrinal significance, and has played an important role among the buildings of esoteric temples, particularly those of Shingon.

Introduction of the new type seems to have been accomplished by the Tendai founder, Dengyō-daishi; who on his return from China set up in 817 two "Hōtō" 寶塔 in eastern Japan, described as "one step," and so probably the standard esoteric form.³⁴¹ In 821 another "one step Hōtō" was erected in the Tendai headquarters on Hieizan, to become its later celebrated "east pagoda." The most famous of all and the largest was undertaken by Kōbō-daishi for his new Shingon monastery of Kongōbuji on Kōyasan, the Kompondaitō 根本大塔 or "original great pagoda," completed some time after his death in 835. This is recorded as having been 160 feet high; the pious chronicler adding that "the mightiness of its single storey outdoes that of multi-storeyed pagodas."³⁴²

The earliest remaining examples today date from Kamakura; the Hieizan east pagoda has long since disappeared, and the Kompondaitō, after numerous burnings, subsists as an entirely modern structure. Two subdivisions of the form are made according to size. In the larger, called Daitō 大塔 in the tradition of the Kōyasan original, and represented by a building of 1514, belonging to Daidempōin 大傳法院 (or Negoroji 根來寺) in Kii Province, the cylindrical core contains two rings of concentric columns.³⁴³ Where only one ring exists, the pagoda is commonly called Tahōtō. This much commoner subdivision is represented by Kamakura examples at Ishiyamadera (fig. 103), in the Kongōsammaiin 金剛三昧院 on Kōyasan, and in several other temples.³⁴⁴

Both classes differ markedly in appearance from the original pagoda form shown in *Mandaras* and often imitated in metal or stone. Around the core of each is set a low, square penthouse with its own square roof, above which only the rounded top of the cylinder is seen. In the Daitō this addition is five bays across, in the Tahōtō three. The reason for the change is still problematical. There can hardly be any doubt that in the original such a penthouse, or *mokoshi*, was lacking. A Japanese painting probably of the twelfth century, showing the scene of Nāgārjuna seeking admittance to the Iron *Stūpa*, gives the building the same form as that of the *Mandara* symbol, with a purely cylindrical core. The same type appears in miniature in the Kamakura period in use as an altar shrine.³⁴⁵ This was certainly the standard brought to Japan in the early ninth century. Whether it was ever erected in Japan as an actual building cannot be proved. The earliest "one step" pagodas set up by Dengyō-daishi may have followed the pure iconographic formula, since the

Bodhisattvas he obtained instruction, which he was able to note down and keep without forgetting. Then he was directed to go out again from the *stūpa*; and the doors closed after him as before. . . ."

³⁴¹ Cf. Fukuyama, "Tendai Shingon," *Bukk-kokogaku-kōza*, iii, pp. 10-11 (Enryakuji), 52 ff. (Kongōbuji Kompondaitō). For the latter, see also Amanuma's restoration drawings, *Shiyō*, pp. 158 ff. and pls. 36-8.

³⁴² Cf. Amanuma, *Zūroku*, Muromachi vol., pp. 114-21.

³⁴³ Cf. *do.*, Kamakura vol. i, pp. 260-7, 308-15, 116-26, 390-7.

³⁴⁴ *Tōyō-bijutsu-taikan* 東洋美術大観, Tōkyō, 1910, i, pl. 48; collection of Baron Fujita, Ōsaka. For the altar shrine, see Amanuma, *Zūroku*, Kamakura i, pl. 434.

penthouse version would be more naturally described as "two step." It seems to me most reasonable to suppose that the Chinese prototype imitated by both sects was built in stone or brick—the material best suited to such a ground-plan—with a wood-framed roof. The total lack of any masonry tradition in Japan forced the substitution of the medium in which the present Daitō and Tahōtō are built, plaster over a wooden framework. Japanese plaster, little more than a hard-surfaced mud, would have been washed away in a few months from the exposed, round surfaces of such a design. The natural solution of the problem was to encase the lower portion of the pagoda in a facade of traditional type, with its own eaves; and to permit only so much of the plastered core to appear as could be protected by the main roof at the top. Whether the first Kompondaitō was of this purely Japanese form or not, the change had been made at least as early as its first rebuilding, at the end of the eleventh century; for the records of construction at that time mention a "*mokoshi* with four sides, of five bays each."²⁴⁵

A variant of the Tahōtō which bore five tall spires on its main roof—one on each corner in addition to the central—existed also on Kōyasan in the middle ages. A Kamakura picture of this so-called Yūgitō 瑜祇塔 or of its iconographic prototype, shows it again as a pure cylindrical core; and here a record states that around the middle of the thirteenth century a "*gaijin*"—which must mean a *mokoshi* penthouse—was added to it. Temple tradition, quoted in a Kamakura account of a visit to Kōyasan, then held that it was this particular small pagoda which was "built in imitation of the Iron *Stūpa* of South India."²⁴⁶ Whatever may have been the basis for such a claim, the five-fold spires seem clearly Indian in source. Perhaps they echoed the memory of the great prototype at Bodhgayā, like the five-fold Chinese stūpas on high terraces at Pi-yün-ssū and Wu-t'a-ssū.

No visible evidence remains in China, whether in stone or in paintings, of anything closely similar to the Tahōtō design. The form must have been built from the middle of the eighth century on at least in the (perhaps limited) territory influenced by the continental patriarchs of Shingon. The Japanese pilgrim Chishō-daishi in 855 visited the temple Ch'ien-fu-ssū 千福寺 at Ch'ang-an, and there worshipped the images of T'ien-t'ai founders in a "Tahōtō."²⁴⁷ Considering the strictness of esoteric Buddhist nomenclature, one may imagine that the name must have denoted the same form in China as in Japan, at least in the ninth century and within a single sect. The T'ang painting history *Li Tai Ming Hua Chi* (iii), listing the frescoes of the religious establishments of the two T'ang capitals, notes under Ch'ien-fu-ssū that there were "portraits of the 24 disciples and propagators of the Law on the boarding surrounding the pagoda" 繞塔板上傳法二十四弟子; which seems to suggest a circular structure. One other Chinese reference, of the Sung period, speaks of the erection in a certain Pao-lin-ssū 寶林寺 of a "Tahōtō (or To-pao-t'a) provided with an encircling chamber" 多寶塔有環室.²⁴⁸ Here perhaps it was the Daitō form with its extra ring of columns and outer aisle, which was meant.

²⁴⁵ Quoted by Amanuma, *Shiyō*, p. 164, from a record of Muromachi date preserved in the Kongō-sammaiin on Mt. Kōya, the *Kompondaitō-kōhai-nikki* 興廢日記.

²⁴⁶ Cf. Fukuyama, *op. cit.*, p. 63, fig. p. 61; Amanuma, *Zūroku* i, pp. 208-9.

²⁴⁷ Cf. Fukuyama, *op. cit.*, p. 10.

²⁴⁸ From the *P'ei Wên Yün Fu* under To-pao-t'a 多寶塔.

Unsatisfactory as the available Chinese evidence may be for the immediate source of the esoteric pagoda form brought to Japan in the early ninth century, the fact of transmission cannot be doubted. Between China and India, the traditional link is strengthened by the most convincing stylistic parallels. Shingon doctrinaires have expended much solemn speculation on the Iron *Stūpa*, debating the problems of its appearance and origin. Was it a human erection, or specially created by the Buddha Himself? Or is the whole story only an allegory, with the *stūpa* standing for the tightly closed Bodhi-heart within the holy Nāgārjuna's own soul? To all this there is naturally no single satisfactory answer. But from a more realistic point of view, we may observe that a clearly defined *stūpa* type existed in central and southern India during the first centuries of the Christian era, which may be seen, for example, in the later caves at Ajanṭā. The original dome at that stage of development is much diminished in scale, and has been raised to the top of a high cylindrical podium. From the crown of the dome, or *aṇḍa*, rises a superstructure called the *harmika*, a square base above which corbelling supports a square platform. Out of the latter rises the spire or mast with its parasols (fig. 101). A comparison of the type with the original Far Eastern Tahōtō (minus the *mokoshi* around the bottom) shows an identity disguised only by varying structural traditions. Drum and dome are clearly the same in both. The Indian stone *harmika*, with its corbelling proper to a masonry technique, was transformed in China to the more familiar wood bracketing; and was crowned by a wide overhanging tiled roof because such roofs are second nature to the Chinese builder, being both a practical necessity and a source of aesthetic satisfaction. In the process of transformation the proportions were of course radically altered, the comparatively modest *harmika* becoming—as bracketing and roof—a principal element in design, while the dome, already diminished at Ajanṭā, lost even more of its individuality. The change was carried a step further by the (presumably Japanese) addition of the *mokoshi*, which made the Tahōtō an almost completely naturalized member of the Far Eastern architectural family.

EXTERIOR AND INTERIOR BUILDING ELEMENTS

BRACKETING:

Bracketing above the columns in the Heian period presents no important changes from the previous style. Since the great majority of remaining buildings are small in scale and simply designed, their methods of eaves support are usually minimal. The main hall of Jōruriji actually lacks bracketing entirely, using a pure post-and-lintel system; and elsewhere the "boat" bracket, *funa-hijiki*, is often the only one used.

The most elaborate examples of the period—found, naturally, in its most elaborate remaining hall, the Hōōdō, and in its two pagodas of Murōji and Daigoji—follow the precedents of Nara almost without change. The only marked difference from the standard of the Tōshōdaiji "golden" hall is a slightly greater complication at the corner. At Tōshōdaiji and in the two Taimadera pagodas—reflecting T'ang practise of the eighth century—the corner eaves system divides clearly into three parts without real interrelationship, two identical units projecting forward and to the side, and one on the diagonal between (figs. 63, 64). In the Hōōdō and in the Daigoji pagoda, the diagonal unit is no

longer limited to a single axis of projection, but itself produces bracketing which emerges forward and to the side; i. e. the second diagonal arm, instead of holding merely a diagonal lever above it, now also holds crossing arms which run out a step further, parallel to the axes of the building. Both of these new arms and the topmost longitudinal brackets, under the purlins which they help to support, belong equally to the diagonal and normal units, and hence help to tie them together (fig. 107). This interrelationship is characteristic of all later Imperially standardized Chinese architecture, and doubtless represents an advance made in late T'ang and transmitted to Japan in the first half of the ninth century, before the interruption of intercourse between the two countries.

The mature corner system is lacking in the small pagoda of Murōji, where various other details show a mixture of earlier and later styles proper to a transitional monument at the beginning of a new age. Thus the corner bracketing also lacks the special bearing-block, *onito*, which had been normal even in mature Nara work, and the interior columns still retain a slight entasis. On the other hand, Heian ideas appear in the proportioning of members, to link this pagoda—probably of the early ninth century—with that of Daigoji at the mid tenth.

The differences of proportioning in the bracket systems of surviving Heian buildings are too great to permit one to postulate any single, average standard—reflecting as they do a very wide difference in size, in loads carried (whether tile or shingles), and in degree of faithfulness to Chinese tradition. In several examples, the capital or bearing-block is made noticeably heavier than before or later (i. e. deeper in relation to its width), while its socket is made shallower. There is no evidence for such a proportion in China, where the evolution from T'ang to Sung was accompanied instead by an increasing lightness. The phenomenon seems a purely Japanese one, and was the result, perhaps, of a distrust of what were essentially alien methods of support, which had been accepted during the frank imitateness of the Nara period but were questioned with the first emergence of an independent point of view. The Murōji pagoda takes its place in this development by showing the shallowest of sockets, occupying only about one-fifth of the "abacus" section, where the Nara proportion would have been twice as much. Both pagodas, again, show a marked diminution from the Nara standard in the projection of their bracket arms (though the otherwise similar system of the Hōdō retains the openness of the eighth century).

One minor decorative development which seems purely Japanese appears in the porches of the Amidadō of Hōkaiji and of the Hōdō. The posts here are square, now with a wide chamfer on the corners which marks a change from Nara. This same bevelling is carried up the underside of the bracket arm, and in the former instance even runs along the purlin. In contrast, a characteristic of earlier styles, the hollowing-out of the upper side of the arm, has now disappeared.

The prime characteristic of Heian bracketing in contrast to that of Nara is its potential use of an alternative to the intercolumnar strut, the decorative *kurinuki-kaerumata*. The feature, as I have said, had been a commonplace of the T'ang style; but whether earlier Japanese versions have all been lost, or because a taste for such elaboration developed comparatively late in Japan, the earliest intercolumnar *kaerumata* remaining there are of late Heian. Three celebrated instances have been preserved, in the interior chancel "friezes"

of the Kami-daigo Yakushidō and of the Chūsonji Konjikidō, and on the left and right-hand of three sanctuaries inside the main hall of the Ujigami Shintō shrine 宇治上神社. The general forms of these vary somewhat, but all are comparatively high; the outer contours, descending in a long sweep from a marked curl at the shoulder, show the possibility of a development from the eighth century *kaerumata* of Tōshōdaiji; the whole effect, while certainly not one of structural stability, still has a decorative strength and lightness of real beauty. The *kaerumata* of the two Buddhist halls are legs only (figs. 85, 104). In those of the Ujigami shrine a further stage is seen, a beginning of decoration in the cut-out interior of the support. Two types are found here, both with a quasi-floral motif growing from the bottom center of the interior. In one, this rises independent of the legs, which merely produce a sort of tuft on each side to harmonize with its outline; in the other, the floral motif is joined to the legs by "branches" whose downward curve contrasts with the rise of the whole form. These two more elaborate versions point the way to the subsequent enrichment of the *kaerumata* in the Kamakura period.³⁴⁹ Once more, nothing of the kind remains in China. On the other hand, the Chinese development of the ornamental panel called *kozama* in Japan is characterized by just such an introduction of a central floral knob into the previously empty interior;³⁵⁰ and thus it is at least possible that the idea in the *kaerumata* also, like so many others, may be traced to a continental origin. Its subsequent transformation in Japan, as usual, soon carried it far beyond what may have been an original borrowing.

A unique instance remains from the Heian period of the diversification of the humble intercolumnar strut by painted ornament. In the frieze around the interior of the chancel of the Amida hall of Hōkaiji, each strut is supplemented by a floral spray, running down on each side in the general shape of a cut-out *kaerumata*, so that it gives a faint suggestion of lateral support as well as an added enrichment.³⁵¹ This is usually discussed by Japanese architects as if it were without parallel in any earlier period, and hence a native invention. In the lintel drawing of the Ta-yen-t'a pagoda at Hsi-an-fu, however, the intercolumnar struts and *kaerumata* both are flanked by painted floral or cloud scrolls (fig. 50); not in precisely the Hōkaiji form, certainly, but close enough to indicate a probable T'ang precedent.

Column entasis, barely perceptible in the four interior pillars of the Murōji pagoda, is absent from the supposedly contemporary "golden" hall of the same temple, and from all subsequent building practise.

BEAMS IN THE WALL PLANE:

Both types of beam used in the earlier periods, piercing and enclosing the columns, are continued in Heian. The latter is now almost universal, whether in combination with

³⁴⁹ Fuller discussions of the Heian *kaerumata* versions are given by Amanuma, *Shiyō*, pp. 206-9, and under the buildings to which they belong in his "Architecture of the Amida Hall," *Bukkyō-bijutsu*, x; also under *kaerumata* in Kawakatsu's *Kokenchiku-nyūmon-kōwa*, pp. 72 ff.

³⁵⁰ An early Ming version, with the floral knob developed into a large voluted form, appears in the mid 15th century Chih-hua-ssū 智化寺 in Peking, as a door ornament (Liu Tun-tseng, in *Bull. of Soc. for Research in Chinese Archit.*, iii/3, fig. 24).

³⁵¹ Cf. Amanuma, *Zūroku* i, p. 266, and discussion under "Hōkaiji" in his "Archit. of the Amida Hall."

or in place of the other, or used some distance below as a lintel above doors and windows. In all instances its greater depth gives it a more massive appearance than in authentic predecessors of Asuka and Nara. In some buildings, like the lecture hall of Kōryūji, the appearance only, and not the actual strength of the member, is different; for the beam which seems so deep is actually cut sharply away in section, where it is invisible, and so has only a fraction of its nominal sturdiness. This decorative degeneration is surprising at so early a period in the development of the member, and may in such buildings be the result of later repairs.

COLUMN BASES AND PLATFORMS:

A general development of Heian architecture, in all but its most monumental manifestations, seems to have been the substitution of wood floors for the stone or tile paving typical of the Chinese style. This change, brought about by national preference, was one of the first and most important steps in the formation of a truly national architecture, since its effect on the character of both interior and exterior design was profound. It marks the beginning of a new architectural ideal, adjusted to Japanese habits and conceptions of comfort and beauty, and destined in the course of centuries to produce a building type almost diametrically opposite to the Chinese in feeling, as picturesque and intimate as the latter is formal and official. Its primary field of expression must have been the domestic architecture of the period, at all times less susceptible to alien influence, and in Heian moving toward the formation of the purely Japanese *Shinden-zukuri*.²²² The change in temple building practise was undoubtedly a reflection of an alteration effected earlier in habits of daily living; other features of the style emphasize this new importance of the Japanese palace, and its ability to influence even religious architecture.

The wood flooring of the Heian temple interior is typically continued outside as a board verandah running around three or four sides of the building, and usually enclosed by a wooden railing (figs. 96, 97). The effect of such a base is markedly different from that of the earlier stone platform, and with the cypress-shingled roof which is its frequent complement is as perfectly symbolic of the Japanese ideal as stone and tile of the Chinese. The earth mound on which the building is raised is visible beneath, its faces often plastered white and given a curving outline roughly like that of the Shinyakushiji altar. The steps are usually of wood, flanked by a continuation of the verandah rail. A by-product of the change from stone to timber is the abandonment in such buildings of any sort of formal column base; since the columns run through the floor to the mound below, their supports are invisible, and thus are of stone merely flattened on the top, as in Asuka.

No original exterior railings remain from the Heian period, due to their exposed position and consequent rapid decay. Those of the Murōji pagoda and of the Hōōdō seem in their later replacements to have retained the style of the originals to a certain degree; in the top storey of the former and in the central block of the latter, the dado includes a horizontal latticing comparable to that of the Kairyūōji pagoda. The projecting ends of the top and middle rails flare upward slightly, and are cut off at an angle, in contrast to

²²² See above, p. 140.

the horizontality and verticality of the earlier style. The evidence of paintings inside the Hōōdō proves that this change had taken place at least by the time of that building's erection in the mid eleventh century.³⁵³ Whether it existed as early as the building of the Murōji pagoda is questionable.

The most monumental Heian halls retained the stone platform and pavement of the Chinese tradition as well as its tiled roof. Thus the explanatory prayer offered at the dedication of Fujiwara no Michinaga's Hōjōji in 1022 speaks of "the tile-roofed 'golden' hall . . . with the jade floor tiles spread over the ground."³⁵² The description of the same buildings in the *Eiga-monogatari*, perhaps a trifle over-enthusiastic, at least implies an effect very different from that of the all-wood style:³⁵⁴

"He who might have looked at the august halls (would have seen as it were) palaces formed of the Seven Treasures. The roof tiles of pearl of the 'jewelled towers' lent the green of their covering, the glazed walls the whiteness of their coat. The gleam of the tiles reflected the sky; there were column bases of ivory, ridges of red gold, gilded doors, platforms of crystal. Thus were they adorned and made majestic with every sort of varied treasure, gleaming in every sort of combination."

The *Eiga-monogatari* speaks also of lesser buildings as having wood floors polished until they were like mirrors.³⁵⁵

The one remaining example of Fujiwara architecture of a comparable class, the Hōōdō erected by Michinaga's son, stands at a stage of compromise between two levels of monumentality (fig. 78). Its stone terrace (later refaced) and the column bases visible in the open wings are in good Nara tradition; but the front and side porches and the interior are floored with wood, and here no bases are visible. The less formal Amida hall of Hōkaiji, also built by the Fujiwara clan, is in the full timber style, with a plastered mound half hidden under its wood porch (fig. 96).

The single, remote parallel to Hōjōji's "pillar bases of ivory" is the type used in the interior of the Konjukidō of Chūsonji, made of gilded bronze in a lotus petal shape (fig. 104). The form is attested for T'ang by the drawing on the lintel of the Ta-yen-t'a pagoda (fig. 50); but whether it was used also in Nara period Japan is unknown.

DOORS AND WINDOWS:

In these elements the Heian period introduced only minor modifications upon the Nara standard. The large doors of the Hōōdō, fitted out with gilded bronze, dumpling-shaped metal bosses and forked hinge plates covered with a floral engraving, are substantially like those of the "golden" hall of Tōshōdaiji; only their construction marks an advance toward convenience and economy of material, the interior being hollow and the

³⁵³ Cf. Amanuma, *Zūroku*, i, pp. 236-7 (compare to p. 68). For the Hōōdō paintings, which presumably were completed before the building's dedication in 1053, see articles by Minamoto in *Bukkyō-bijutsu*, xviii, xix. The palace scene on the wall behind the image shows a dance stage whose railing bars clearly flare upward at the corners (xviii, fig. opp. p. 120).

³⁵⁴ See above, p. 133.

³⁵⁵ *Eiga-mon.*, xviii, "Tama no Utena," p. 442. 後の御堂の板敷を見入るれば鏡のそうにて外なる人の影さへ映りて見ゆれば。

front and rear plank surfaces held by a framework on the four sides. During the period a meeting-rail, or *jogibuchi* 定規椽, came to be adopted; fastened vertically along the edge of one valve, this covers the line of intersection of the two when closed, concealing any possible divergence.

During the Heian centuries, temple architecture of a more informal character adopted other door forms, absent from the Chinese style and developed undoubtedly in the palaces of the period. These are of two types, often used together. On the outside are reticulated wood shutters, or *shitomido* 蔀戸, which cover the opening in two halves; the upper, hinged at the top, is held when open by an iron bar hanging from the eaves; the lower half, merely fitted in, is removed when the shutters are opened. On the inside are sliding doors, reticulated or crossed by horizontal bars only, the *mairado* 舞良戸. These forms are often seen in genre paintings of the Heian and Kamakura periods (fig. 110).²⁵⁶ It was probably the latter, sliding variety which was used in the lecture hall of Myōrakuji between chancel and public area, since the *kakushi* 隔子 "partitions" mentioned in the text are in clear distinction to the *hirakido* 開戸 "opening doors" used on the exterior.

The fixed frames around hinged doors and latticed windows, instead of being merely composed of rectangular timbers, are now enriched by a simple and beautiful combination of plane and curved mouldings technically known as the *karatomen* 唐戸面. These persist, in the "Japanese style" based on Nara and Heian tradition, throughout the rest of architectural history, but with a gradual degeneration of form which clearly marks old age from youth.

ROOFS AND THEIR ORNAMENTS:

As a part of the Heian reaction against imported standards, the majority of temple buildings of the period—like those of all but the most official sections of contemporary palaces—seem to have been roofed with the native material of cypress shingles. The temple inventories which have been preserved, comprising such important esoteric establishments as Enryakuji, Daigoji, Jingōji, and Kongōbuji, are almost unanimous on this point. At Daigo in late Heian only the pagoda, by tradition, and two storehouses, for greater safety against fire, were tiled. In the great metropolitan Shingon headquarters of Tōji all roofs were shingled except those of the old-fashioned "golden" hall, lecture hall, and cloister nucleus of the early ninth century.²⁵⁷ In the foremost erections of the Fujiwara clan at the height of its glory, tile was used in the same way for the nuclear buildings of first importance, but all the rest were of cypress.

The evidence of twelfth century picture-scrolls shows that the Imperial palace of Kyōto, in its most monumental and traditional gateways and audience halls, retained until the end of the Heian period the "owl's-tail" ridge acroteria standardized in Nara.²⁵⁸ No

²⁵⁶ The *Kasuga-kenki* (*N-emak-shūsei*, iii, pl. 3) shows, for example, the *shitomido* pulled up, and the doorway closed only by a hanging bamboo screen; the adjacent bay has normal hinged doors on the outside. See also pls. 46-7, etc. *Mairado* are shown in pls. 73, 78, etc.

²⁵⁷ Cf. the inventories quoted by Fukuyama, "Tendai Shingon," *Bukk-kokogaku-kōza*, iii.

²⁵⁸ E.g. palace gate buildings shown in the *Shigisan-engi*, *Ban-dainagon-ekotoba*, and *Nenjū-gyōji*, and the views in the last of the Daigokuden complex: *N-emak-shūsei*, vii, pl. 22; i, pl. 2; xii, pls. 6, 26 respectively.

examples of the kind, and so far as I know, indeed, no original roof ornaments of any sort, have been preserved on extant Heian buildings. Fragmentary demon-faced acroteria which have been found and attributed by style to Heian are not markedly different from those of the preceding age.

The change in roof construction during these centuries which I have already noted, from the single shell of Chinese practise to the double shell typical of later Japanese building, must have resulted in a general increase in roof slope. In the lower storeys of the Murōji and Daigoji pagodas, which probably preserve their original method of framing, the change is still slight. All other buildings seem to have been re-roofed at later periods, in some cases with an alteration of their original appearance. The hipped roof of Jōruriji, still low and gradual in slope, must preserve its first beauty almost unaltered. The gable field of the Hōōdō, on the other hand, like that of Shinyakushiji, has apparently been reduced in area by recent rebuilding with a raised roof slope, which has concealed brackets and purlins once probably visible under the new tiles.

At Hōkaiji and in the Hōōdō, the porch roof is not continuous, but in a central section, in front of the main door, breaks up to a level several feet higher than the rest. The device, essentially Japanese in its picturesqueness, seems to have no basis in Chinese tradition (figs. 78, 96).³⁵⁹

INTERIOR BEAMS AND INTER-BEAM SUPPORTS; THE GABLE FIELD:

The Heian "rainbow" beam is noticeably different in form from its predecessors. A curve remains at the "shoulders" at either end, but the greater portion of the span is almost horizontal, much to the detriment of its appearance. The beams of the early Heian "golden" hall of Murōji still have the corner-stone-shaped cross-section of Nara; later this is abandoned, and instead—as in the Hōōdō—the sides bulge out slightly. The end of the beam no longer runs out horizontally, but on its upper surface is cut off on an ascending slant.³⁶⁰

Solid *kaerumata* are used in the Hōōdō both in the central block, to hold the frame of the ceiling (fig. 105) and in the open roofs of the wings. Here, as in the open roof of the Kōryūji lecture hall (fig. 108), the construction, with its two tiers of "rainbow" beams and the *kaerumata* between mounting to the ridge-pole, is entirely in Nara tradition. The forms used, although solid, are in their outer contours almost exactly like those of the contemporary cut-out *kaerumata* used in intercolumnar bracketing, fairly high (except in the Hōōdō wings), and sweeping up from either "foot" to a marked curl on either side of the bearing-block.

Heian gable fields show no appreciable change from those of Nara, and like their predecessors have lost all original barge-boards and "hanging-fish" drops. The full gable of the Hōryūji bell pavilion, obviously modelled on the two-tier beam and *kaerumata*

³⁵⁹ Cf. Amanuma, *Zūroku*, i, pp. 226, 262. It has been supposed that the Tōdaiji Daibutsuden in its original form also possessed this feature, since the latter is the only possible explanation for the way the facade of that hall is shown in the 12th century *Shigisan-engi* (*N-emak-shūsei*, vii, pl. 48), with the columns of the middle 7 bays taller than those on either side. See note 182.

³⁶⁰ Cf. *Zūroku*, i, pls. 232, 238, etc. (Hōōdō); Kawakatsu, *op. cit.*, pls. 33, 64.

system of the Nara *sūtra* repository opposite it, varies only in the shapes of its members. The hip-and-gable fields of the Hōōdō and the Kami-daigo Yakushidō, exposing inverted "V" kingpost braces, are of the same type as that of Shinyakushiji.³⁶¹

CEILINGS AND CANOPIES:

The Hōōdō, in keeping with its general retention of Nara formulae, uses in its main block a coved, reticulated ceiling of the same type as that of the "golden" hall of Tōshō-daiji, raised on the same sort of two-step, three-tier bracketing (fig. 105). The slope of its cove is noticeably steeper. In itself entailing some loss of formal beauty, this change has an unfortunate by-product. The frame around the flat ceiling above the cove must be supported by *kaerumata* standing on the "rainbow" beams. In the Nara version of the design, the gradual slope of the cove had permitted the whole *kaerumata* to fit in alongside it; here the greater steepness makes cove and *kaerumata* intersect, hiding a portion of the latter.

The Hōōdō canopy, hanging above its icon of Amida, has the general form even of those of Asuka, with a cornice-like crest at the top and a miniature ceiling inside (fig. 111); beneath its center is fixed a great sunburst generally recalling those of the Hokkedō. Materials and details are very different, with an elaboration and delicacy of scale characteristic of the luxurious tastes of Heian aristocracy. The methods of decoration will be spoken of more fully in the section below; it should be noticed here that the ceiling inside the canopy differs from the Nara form retained in the building itself, being subdivided not only by a closely spaced reticulation but by wider members as well, into much larger panels. This is a forerunner of a ceiling type very popular in Kamakura, in which a combination of two sizes of panelling is standardized for use both with and without a cove, over either chancel or aisles. The type, known as *kogumigō-tenjō* 小組格天井, makes a sporadic appearance, also, in buildings of very late Heian, the Amida hall of Shiramizu and the Ōdō, "great hall," of Fukiji.

The chancel of the Sanzenin hall has a unique form comparable to that of an over-turned boat, without apparent reason or parallels elsewhere.³⁶²

ALTAR PLATFORMS AND RAILINGS:

Standard Heian altar platforms are those of the Amida hall of Hōkaiji, the Hōōdō, and the Konjikidō.³⁶³ In wood, these repeat the main lines of the stone platform of Tōshō-daiji. In the first the dado panels are filled with horizontal latticing; the others all contain the more elegant *kozama* panel. The shape of the latter is usually markedly different from that of Nara, much higher in proportion to its width (like the contemporary *kaerumata*), so that its sides descend more steeply; at the same time the sharply drawn indentations along the top of the Nara version have been smoothed down into a more gentle undulation. The platform faces may be profusely decorated; the interiors of the *kozama* may be left

³⁶¹ *Zūroku*, i, pls. 231, 274, 276 (Hōōdō, Hōryūji bell pavilion).

³⁶² *Ibid.*, pls. 224-5.

³⁶³ *Ibid.*, pls. 266-7 (Hōkaiji); 242 (Hōōdō); 304-5 (Konjikidō). In the Hōōdō altar platform, the lion and peony panels inside the *kozama* are additions of the 18th century.

empty, but in the Konjikidō are filled each with a peacock in relief. The latter also echoes the lotus-petal mouldings around the bases of its interior columns by the same sort of base member at the bottom of its platform (fig. 104).

Platform railings are of traditional form, with the upflaring rail ends which we have seen as characteristic of the mature Heian style. A new element, the newel post, now makes its appearance in the Amida hall and Hōōdō, stopping the railings which descend the platform stairs. In the latter building, these are much later replacements, but the former's are originals, full of a lovely freshness and vitality of design. The knob is a conventionalized lotus bud, sheathed in gilded bronze; this metal cap runs down over the top of the post below, and seems held there by a three-fold banding. The proportions of the whole newel, the *hōju-bashira* 寶珠柱 or "precious jewel post," are admirably worked out, the lotus-bud low, the neck small, and the post gradually diminishing, so that one element merges without a visible break into the next.²⁶⁴

DECORATION:

If the most prized buildings of Heian were less overwhelming in size and majesty than those of Nara, they seem in general to have compensated for this comparative loss of monumentality by a much greater elaboration of ornament. A comparison between the best of both periods, the "golden" hall of Tōshōdaiji and the Hōōdō, is not entirely fair, since the interior of the latter is so much better preserved.²⁶⁵ Even in their original states, however, the Hōōdō must have considerably outdistanced its predecessor in the richness and variety of its decorative details. Every portion of the chancel woodwork is intricately painted; the undersides of the beams have in addition gilded lotus rosettes spaced along their spans, and at their intersections are emphasized by pierced gold plates. The altar platform is of lacquer, with an exquisitely delicate all-over inlay of mother-of-pearl, its panel divisions marked by gold plates with an incised floral design. Most amazing of all is the canopy, all gold outside, with openwork floral panels of the greatest complication and a luxuriant peony *chéniaux* above; inside, its painted ceiling and the inlaid lacquer bars which subdivide it stand in the most dramatic contrast to the great pierced-gold central rosette (fig. 105).

The motives used are predominantly floral; above all a type of medallion formed of conventionalized *hōsōge*, "precious image blossoms," varying in elaboration with the size of the member on which it is placed. Such medallions occur with an apparently unlimited variety of shape and combination; the imagination of the artist has extended even to the introduction of bird and animal forms, half disguised, among the flowers. On the interior columns are painted arabesques of dancing and music-making angels against a rinceau background, an idea certainly related to T'ang precedent but executed now with a wholly Japanese sense of delicacy and gentle grace. In general this decorative painting is more formalized than its half-realistic Nara prototype. Its one weakness is that char-

²⁶⁴ Cf. Amanuma's discussion of the possible origin of this newel form in his "Architecture of the Amida Hall," *Bukk-bijutsu*, x.

²⁶⁵ Cf. Amanuma, *Zūroku*, pp. 138-40, 243-59.

acteristic of the whole Fujiwara age, an excessive refinement and smallness of scale, destined in later generations to lapse into effeminate weakness. It is the ornamentation of cabinet-making rather than architecture; and stands thus in the utmost contrast to the decorative painting of the Ming and Ch'ing style, which may be stereotyped, unimaginative, and coarse in detail, but is brilliantly architectonic.

In the Konjikidō of Chūsonji, built in obvious emulation of Fujiwara achievements in the capital, the tour de force is in its way even more striking (fig. 104). The whole interior (a very small one, certainly) is lacquered, and its important elements, including the altar, are all inlaid with mother-of-pearl patterns, no less intricately sumptuous than those of the Hōōdō. The Heian altar platform is here at its most beautiful, with gold peacocks, delicately incised, inside its *kozama* panels, and the rich lotus petal base echoing those of the chancel columns. Originally the whole exterior of the building was gilded; it was to preserve this that it was enclosed in an outer architectural shell in the thirteenth century. In spite of the precaution almost nothing of the original color remains on the outside today.

A less impressive, but equally significant achievement of Heian interior design is seen in the Amida hall of Shiramizu (fig. 106). What is new here is not any extravagance of decoration, but rather a striving toward a greater simplicity and refinement of details. The small-scale reticulation of the coved ceilings, so different from the boldness of the eighth century, has already been mentioned. To carry out this ideal—perfectly paralleled in the feminine delicacy and minuteness of late Heian painting and sculpture—every possible element which might contribute a now unwanted monumentality to the interior is abandoned. There are no visible brackets or girders; the necessary chancel columns are not emphasized in any way; wood surfaces, except for the ceilings, serve as a completely plain foil for the decoration placed on them. This type of temple room—obviously at a half-way stage between monumental Chinese tradition and the informality and lightness of Japanese domestic architecture—will continue as a charming compromise into the Kamakura period.

CHAPTER III: THE KAMAKURA PERIOD

IMPORTANT ARCHITECTURAL REMAINS

THE "INDIAN" STYLE, *Tenjikuyō*:

Daigōji:

Sūtra repository (in the upper temple)

Jōdōji 淨土寺: Hyōgo-ken, Katō-gun, Ono-machi 小野町:

Jōdōdō 淨土堂, "Pure Land hall"

Tōdaiji:

Great south gate

Bell pavilion (later, and mixed in style)

Hokkedō front half, or *raidō* (later, mixed)

Kaisandō 開山堂 or Ryōbendō 良辨堂, founder's memorial chapel (later, mixed)

THE "CHINESE" STYLE, *Karayō*:

Ankokuji 安國寺: Hiroshima-ken, Numakuma-gun, Tomo-machi 鞆町:

Shakadō

Bannaji 錢阿寺: Tochigi-ken, Ashikaga-shi, Ietomi-machi 家富町:

Main hall

Eihōji 永保寺: Gifu-ken, Kani-gun, Toyooka-mura 豊岡村:

Kaisandō

Kannondō

Engakuji 圓覺寺: Kanagawa-ken, Kamakura-gun, Kosaka-mura 小阪村:

Shariden 舍利殿, relic hall

Fusaiji 普濟寺: Kyōto-fu, Funai-gun, Higashihonume-mura 東本梅村:

Main hall

Jinkakuji 神角寺: Ōita-ken, Ōno-gun, Nishiōno-mura 西大野村:

Main hall

Kōzanji 功山寺: Yamaguchi-ken, Toyoura-gun, Chōfu-machi 長府町:

Butsuden, Buddha hall

Seihakuji 清白寺: Yamanashi-ken, Higashiyamanashi-gun, Goyashiki-mura 後屋敷村:

Butsuden

Tenonji 天思寺: Aichi-ken, Nukada-gun, Toyotomi-mura 豊富村:

Butsuden

Umeda 梅田 Shakadō: Wawayama-ken, Kōsō-gun, Kamo-mura 加茂村

THE "JAPANESE" STYLE, *Wayō*, AND THE "MIXED" STYLE, *Setchuyō*

Akishinodera: Nara-ken, Ikoma-gun, Heijō-mura:

Main hall

- Bujōji 峰定寺: Kyōto-fu, Otagi-gun, Hanase-mura 花脊村:
Main hall
- Byōdōin:
Kannon-dō
- Chōhōji 長保寺: Wakayama-ken, Kaisō-gun, Hamanaka-mura 濱中村:
Main hall
Tahōtō
- Chōjūji 長壽寺: Shiga-ken, Kōga-gun, Ishibe-machi 石部町:
Main hall
- Daifukkōji 大福光寺: Kyōto-fu, Funai-gun, Takahara-mura 高原村:
Main hall
Tahōtō
- Daihōonji 大報恩寺: Kyōto, Jōkyō-ku, Gotsujirokken-machi 五辻六軒町:
Main hall
- Daigoji:
Kondō (of the lower temple)
- Daizenji 大善寺: Yamagata-ken, Higashi-yamagata-gun, Katsunuma-machi 勝沼町:
Main hall
- Enryakuji 圓歷寺: Shiga-ken, Shiga-gun, Sakamoto-mura 坂本村:
Shakadō
- Futaiji 不退寺: Nara-ken, Nara, Hōren-chō 法蓮町:
Great south gate
Main hall
Pagoda (unfinished)
- Gokurakuin 極樂院: Nara, Chūin-chō 中院町:
Main hall
- Hannyaji 般若寺: Nara, Hannyaji-machi:
Two-storeyed gateway, Rōmon 樓門
- Hōryūji:
Kaminomidō 上御堂
Shōryōin 聖靈院
Edono and Shariden 繪殿 舍利殿 (in the Eastern Precinct)
Yumedono *Raidō* (“ “ “ “)
- Ishideji 石手寺: Ehime-ken, Onsen-gun, Dōgo-mura 道後村:
Main hall
Pagoda, three-storeyed
- Ishiyamadera:
Tahōtō
- Jōdōji 淨土寺: Hiroshima-ken, Onomichi-shi, Ozaki-chō 尾崎町:
Amidadō
Main hall
Tahōtō
- Jōmyōji 淨妙寺: Wakayama-ken, Arita-gun, Mishima-machi 箕島町:
Main hall

- Kaijusenji 海住山寺: Kyōto-fu, Sōraku-gun, Mikanohara-mura 瓶原村:
Pagoda, five-storeyed
- Kakurinji 鶴林寺: Hyōgo-ken, Kako-gun, Ikaruga-mura 鳩里村:
Main hall
- Kanshinji 観心寺: Ōsaka-fu, Minami-kawachi-gun, Kawakami-mura 川上村:
Main hall
- Kikōji 喜光寺: Nara-ken, Ikoma-gun, Fushimi-mura 伏見村:
Main hall
- Kōfukuji:
Hokuendō 北圓堂, "north octagonal hall":
Pagoda, three-storeyed
- Kongōbuji: Wakayama-ken, Kōyasan:
Fudōdō 不動堂, hall of Fudō
- Kongōji 金剛寺: Ōsaka-fu, Minami-kawachi-gun, Amano-mura 天野村:
Main hall
- Kongōrinji: Shiga-ken, Aichi-gun, Hatakawa-mura 秦川村:
Main hall
- Kongōsammaiin: Kōyasan:
Tahōtō
- Murōji:
Main or "baptismal" hall, Kanchōdō
- Myōrakuji 妙樂寺: Fukui-ken, Onyu-gun, Imatomi-mura 今富村:
Main hall
- Reizanji 靈山寺: Nara-ken, Ikoma-gun, Tomio-mura 富雄村:
Main hall
Pagoda, three-storeyed
- Rengeōin 蓮華王院: Kyōto, Shichijō-dori:
Sanjusangendō 三十三間堂: "33 bay hall"
- Saimyōji 西明寺: Shiga-ken, Inukami-gun, Higashi-kōryō-mura 東甲良村:
Main hall
Pagoda, three-storeyed
- Shōshōin 性松院: Wakayama-shi, Kataoka-chō 片岡町:
Main hall
- Taimadera:
Mandaradō, hall of the *Mandara*
"Golden" hall
Lecture hall
- Taisanji 太山寺: Hyōgo-ken, Akashi-gun, Ikawadani-mura 伊川谷村:
Main hall
- Taizanji 太山寺: Ehime-ken, Onsen-gun, Wake-mura 和氣村:
Main hall
- Tōji: Kyōto, Kujō-dori:
Various gateways.
- Yakushiji:
Tōindō 東院堂: Eastern Precinct hall

THE KAMAKURA PERIOD; GENERAL

Buddhist architecture of the Kamakura period is commonly apportioned among three stylistic subdivisions. Two of these represent newly imported Chinese fashions: one traditionally brought to Japan in the latter twelfth century by the pilgrim Shunjōbō-chōgen 俊乗坊重源 and first used in the rebuilding of Tōdaiji after its destruction by the Taira soldiery; the second introduced with the Chinese sect of Zen in the early thirteenth. The third subdivision is the indigenous style, formed during the Heian period by a naturalization of Chinese ideas. The names given to the three in Japanese discussions are, respectively: *Tenjikyō*, the "Indian" style; *Karayō*, the "Chinese" style; and *Wayō*, the "Japanese" style. The terminology is ill-chosen and misleading. The "Indian" style we shall find to be a provincial one of south China; the "Chinese"—written with characters which mean literally the T'ang style—was actually the official building manner of the Sung. What remained from the T'ang tradition in thirteenth century Japan was the property of the so-called "Japanese" style—a phrase which theoretically should be applied only to such purely Japanese, pre-Buddhist architecture as that of the Ise and Izumo shrines. The names have the authority of long usage, however, and it would be difficult to find more accurate substitutes which would not also be more cumbersome. After this note of warning, I shall use them freely.

A fourth subdivision frequently mentioned is the *Setchuyō* 折衷様 or "mixed" style: a type of architecture formed by a combination of elements taken from two, or even from all three, of the others. Signs of such interchange of influence are noticeable early in the thirteenth century. The attainment of a degree of fusion complete enough to be spoken of as a style, is a phenomenon of the fourteenth and later. Even the earliest temples commonly placed under the *Setchuyō* probably post-date the literal ending of the Kamakura period with the fall of Kamakura in 1333 and the suicide of the last Hōjō regent. The subsequent two generations, from 1336 to 1392, the so-called Nambokuchō 南北朝 era, during which two branches of the Imperial family occupied rival thrones, is always something of an annoyance to historians, since it is hardly long enough to be dignified by a subdivision of its own, and there are as good reasons for linking it to Kamakura as to Muromachi. For convenience of treatment in art history, it is usually considered as a final phase of the Kamakura period, even though Kamakura was no longer of any importance, and effective control over a large part of Japan was already in the hands of the Ashikaga Shōgun. This chronological method seems preferable for the history of Japanese architecture as well, and thus brings an inclusion of the early "mixed" style in the present chapter. Two great sources of temple architecture existed in the last generations of actual Kamakura supremacy, the newly introduced sect of Zen and the old orders of Tendai and Shingon. The former continued without serious interruption and with a constantly increasing dominance from its first blooming in the mid thirteenth century well through Muromachi and into Edo; any division of periods must inevitably make a wholly artificial break in respect to Zen. The esoteric sects, sharing the fate of the Kyōto society on whose prosperity they depended, suffered the same long submergence under the Ashikaga. Their last great patron seems to have been the Emperor Go-daigo, in his valiant attempt to

restore the old order (1319-38). Tendai and Shingon halls of great size and elaboration were still erected during subsequent generations of the fourteenth century, in what must have been a time of sinking fortunes. With the fifteenth, and the establishment of a new Kyōto society dominated politically and aesthetically by the Ashikaga and ecclesiastically by Zen, there were very few new erections; and even the restoration of buildings of the older sects was carried out with difficulty. Most of the great periodic religious ceremonies of old Nara and Kyōto, many of which had been observed without interruption since the eighth century, dwindled to an end in the mid fourteenth; the great halls which had accommodated them were allowed to fall into ruin, and waited sometimes for generations to be rebuilt. From the standpoint of traditional Japanese architecture, therefore, the break between the fourteenth and fifteenth centuries was a real one, and justifies a corresponding division in treatment.

The subdivisions of style existing during the Kamakura period hinder any attempt to present Japanese architectural history in a completely coherent scheme of development. The "Japanese" style in design of ground-plan should follow directly after the Heian period, since this feature was entirely dependent on indigenous tradition. In details, on the other hand, the *Wayō* was strongly influenced by the new fashions imported from China; thus this phase of the style should logically be treated after the *Tenjikuyō* and *Karayō*. In deference to the latter reason, discussion of the Buddhist architecture of the Kamakura age opens below with the "Indian" style. From the standpoint of the plan evolution which has been the most important characteristic of Japanese Buddhist architecture as a whole, however, it should be remembered that this method of presentation interrupts what was actually an unbroken sequence; since neither of the Chinese styles had any effect on this phase of the development.

THE "INDIAN STYLE," *TENJIKUYō*

One of the first Japanese to profit by the resumption of intercourse with China in the twelfth century was the priest Shunjōbō-chōgen, a student of esoteric Buddhism at Daigoji, and in later years a follower of the Pure Land Teachings of Hōnen-shōnin. Chōgen crossed to south China in 1167. In company with Eisai 榮西, who a generation after was to be the first proponent of Zen in Japan, he ascended T'ien-t'ai-shan; continuing thereafter to Ming-chou, he worshipped at the relic pagoda of A-yü-wang-ssū 阿育王寺, the "temple of King Aśoka," and returned to Japan in the autumn of 1168. His unique opportunity in the field of Buddhist architecture came with the burning of Tōdaiji by a Taira army in 1180. Through the insistence of his master Hōnen-shōnin, he was made the director of the bureau imperially created in the following year to undertake the rebuilding of the temple and the restoration of its giant images. In 1182 he secured the services of one Ch'ên Ho-ch'ing 陳和卿, a master bronze-worker newly landed in Kyūshū. In the work of repairing the colossal Birushana image, which lasted until 1185, this artisan with his younger brother Chu-fo 鑄佛 and seven assistants collaborated with the Japanese bronze-master Kusakabe no Koresuke 草部是助 and the fourteen under him. In 1168 Chōgen led a party of architects, including the Ch'ên brothers, to select timbers for the new Tōdaiji buildings in the mountains of Suō Province. This longer task reached its first goal in 1195,

with the completion of the Daibutsuden and the middle gate. In the last years of the century were set up the Kaidanin, or Ordination Precinct, the great bath-house, and the great south gate; the rest of the tremendous complex, through a natural slackening of effort, was not finished until considerably later.²⁰⁰

²⁰⁰ The burning of the great Nara temples in 1180 was the result of their meddling in contemporary politics. Hatred of the usurper Taira no Kiyomori brought together against him a court cabal headed by an Imperial Prince and led in battle by the general Minamoto no Yoritomo 頼政. The rebellious faction was overwhelmed by Taira soldiers at Uji Bridge in 1180. The Taira leader Shige-hira 重衡, son of the Regent, marched straight to Nara after his victory, murdered the Prince, and in retaliation against the great monasteries who had sent their warrior priests to help the Minamoto, burned down both Tōdaiji and Kōfukuji. This was one of the comparatively rare instances in Japanese history in which the naturally pious Japanese fighting man committed a major atrocity against religion. The Chinese soldier or bandit has always enjoyed burning down a temple as much as anything else. In Japan the great disasters suffered by Buddhist establishments have come normally through the caprice of Nature, or through one temple's jealousy of another; the Tendai monks from Mt. Hiei, smoking out their Tendai neighbors at Onjōji time after time in late Heian, seem to have suffered none of the qualms of the more naive laymen. The destruction especially of Tōdaiji and its great Buddha had a tremendous effect on popular imagination. In China it has always been the destruction of a great palace—the O-pang-kung of Ch'in Shih Huang Ti, or the Forbidden City of the Mongols at Peking—which has aroused comparable emotions. The Japanese palace never seems to have acquired any such imaginative appeal. Its comparatively moderate scale; perhaps an instinct inherited from earlier centuries which made it seem always a temporary dwelling rather than a monument for all time; and the frequent calamitous fires which took place all through the Heian period, from natural causes, robbed any single disaster of true tragic importance. Tōdaiji and its great Buddha, however, were both unique in size (and in the evidence they gave of Japanese accomplishment), and after three and a half centuries were already remarkable for their antiquity and undiminished grandeur (at an age when many of the surrounding Nara monasteries had fallen into ruin). The loss, not only to Nara and its ancient Buddhist sects, but to the pride of Imperial Japan, was overwhelming. So long as ancient tradition retained any strength, it was inevitable that an attempt should be made to restore Tōdaiji and the Daibutsu to their original grandeur. At the end of the 12th century, however, real power had passed to the parvenu military caste; for Tōdaiji it was a fortunate accident that in the end the Taira were driven out of power, and that the victorious Minamoto Shōgun recognized a feudal responsibility to reward the former partisans of his clan. Thus the greatest visible symbol of the old empire of the Nara period was first destroyed and then rebuilt by the newly emerging feudal system. When Tōdaiji was burned for the second time in 1567, in one of the interminable petty squabbles of *Bushidō*, the united Japan which it epitomized had long been forgotten. The monastery was left in ruins for over a century; and it was only in mid Edo, when there was once more a centralized authority and a national pride, that its essential buildings were set up again.

A detailed account of the restoration undertaken under Chōgen is quoted from Tōdaiji records by Hattori, *Nihon-kokenchikushi*, Kamakura vol., pp. 180 ff. The principal source is the *Tōdaiji-zōritsu-kuyōki* 造立供養記 of 1452 (*Gunshoruijū*, *Shakkabu*, pp. 398 ff.). The giant timbers selected in the mountains were either 90 to 100 ft., or 70 to 80 ft. in length, and in diameter were around 4.5 ft. The difficulties of transportation were great. Two windlasses were used for each, being hauled by 70 men; the record adds "without the windlasses, it would have been necessary to use 1000 men or more," which implies that they were something of an innovation in hauling (and which suggests that they may have been introduced by the always more mechanically ingenious Chinese). The timbers were floated out of the mountains on a river, and were shipped by water most of the way to Nara. On the final lap overland from the Kizu River, they were hauled in great carts, pulled by 120 oxen and by many pious devotees, both secular and clerical. The Retired Emperor Go-shirakawa and his wives were present; the former himself deigned to hold a hawser, along with the court nobles, and one end of a hawser was passed into the

In carrying on the teachings and practises of the Pure Land school after the death of Hōnen-shōnin in 1186, Chōgen set up a number of places of worship in various provinces, for special performances of the rite of uninterrupted invocation of Amida's name. From this work of dissemination one building remains, the Jōdōdō or "Pure Land Hall" of Jōdōji in Hyōgo-ken, from its style clearly erected under the same direction as the new Tōdaiji.³⁰⁷ The third and last site in which the imported manner is visible in its first purity is the *sūtra* repository of Kami-daigo, the temple which for many years had been Chōgen's residence.³⁰⁸ The wholly novel methods of construction of the *Tenjikuyō* thus

august carriage of the Imperial wives, so that they might acquire merit by pulling upon it (*Gunshoruijū*, p. 403).

"In (1190)/7/27, the first two main interior columns of the Daibutsuden were set up, being 91 ft. high and 5 ft. in diameter. Eight windlasses were placed upon a scaffolding and six more on the ground. All present chanted, with different mouths making the same sound; and to the beat of a drum, drew them upright. The columns of the aisles had already been erected. Later, in 10/19 of the same year, the ridge-pole was raised. The Retired Emperor made an Imperial progress thither; and from the Regent down, the Three Dukes and the Nine Ranks of Nobles all crowded together. Long cables were attached to the ridge-pole to a length of 122 ft., and carrying down to the middle gate (being fashioned with) one strand of Chinese figured cloth 唐綾 and one of fine cloth (?) 美布. The right-hand cable was held first by the Retired Emperor, and then by the Lay Stewards 別當 and the ecclesiastical hierarchy of the temple. The left-hand one was held first by the Regent (then Kujō Kanezane 九條兼實) and then by the Hundred Civil and Military Officials . . ." (*Gunshoruijū*, p. 404).

With reference to the dedication ceremony of 1195/3/12, the same record states, "It was the former Commander of the Right Imperial Bodyguard, the Lord Minamoto of Kamakura (i.e. Yoritomo) who became the chief patron of the temple. He chanced to be present at the dedication, leading an army of several tens of thousands out of Sagami Province, on the way to the capital. First he directed that a contribution be made from Yagi (in lower Yamato) of 10,000 *koku* (of rice); then he made other, repeated contributions, as of 713 draft horses, 1000 *ryō* of gold, and 1000 rolls of fine silk. The source of the completion of the great Buddha, from first to last, without any obstruction in the sequence, must be ascribed only to the authority of the Great Commander of the Right" (*ibid.*, p. 405). Thus although the dedication ceremony was carried out in all the brave pageantry of earlier days, before the great officers of the Imperial entourage, real power to build at the scale of Tōdaiji had passed into new hands, and to a new geographical center, Kamakura.

³⁰⁷ Cf. Hattori, *N-kokenchikushi*, Kamakura vol., pp. 201 ff.; Amanuma, *Shiyō*, pp. 278 ff.; *Zūroku*, Kamakura vol. ii, pp. 156-70; *Kokuhō-kenzōbutsu*, 國寶建造物 iii/3 (Tōkyō, 1936); Kanda 神田, "Sur l'architecture de Zyōdōdō dans Zyōdōji," *Tōyō-bizyutu*, xviii, July, 1933, pp. 40 ff. The last discusses the history of the temple, as given by its *Engi* 緣起 which it still preserves. According to this account, the place had first been organized for Buddhist worship in the 8th century. Its restoration at the end of the 12th "was due to the initiative 啓迪 of the builder of Tōdaiji, Shunjōbō-chōgen," who ordered his disciple Kana-shōnin 観阿上人 to make a monastery on what remained of the old site. As to the Jōdōdō itself, the entry in the *Engi* reads:

"(1194) there was also set up (i.e. the year after the main hall, or Yakushidō) one 9 *ken* 4 *men* hall, to have the honor of enshrining a gold-colored standing image of Amida-nyōrai, 16 ft. tall . . ."

The existing Jōdōdō, which houses the image of Amida, would be described in Heian terminology as 1 *ken* 4 *men*. So large a discrepancy must mean either an error in transcription of the *Engi*'s text, or that it uses some new way of reckoning, to me unintelligible, I do not believe that it has ever been supposed that the present building (which is in the purest *Tenjikuyō* style) is anything but the original Amida hall. See below, pp. 252-3 and note 435, for reference to the other large building of Muromachi date still extant, the Yakushidō.

³⁰⁸ Cf. Hattori, *op. cit.*, pp. 217 ff.; Amanuma, *Shiyō*, pp. 276-8; *Zūroku*, Kamakura vol. ii, pp. 114-33.

appear, in their first phase, exclusively in buildings associated in one way or another with this priest, so that it is only reasonable to suppose that their adoption was due either to his personal direction or to his choice of architects who were either Chinese or trained in Chinese practise.

The authority of Chōgen, indeed, seems to have been indispensable to the prosperity of the new style. The *Tenjikuyō*, as we shall see in detailed analysis of its features, represents not only a radical departure from the structural methods current in Japan in the twelfth century, but an aesthetic ideal fundamentally alien and uncongenial to Japanese taste. After the death of its one great propagandist in 1205, its initial vitality rapidly declined. Even at Tōdaiji, where its prestige was greatest, and where a whole generation of architects and carpenters must have been educated in its practises, the style was soon adjusted to more familiar standards. Tōdaiji buildings of the middle and late thirteenth century, like the *raidō* addition to the Hokkedō,²⁶⁹ show a mixture already more Japanese than foreign. Outside of Nara, even so close as Kyōto, its structural conventions were very rarely adopted. There from the start its influence seems to have been confined to a choice of minor details, which at the time were modern and fashionable. Even those gradually fell out of use; so that from the fourteenth century on, the *Tenjikuyō*—outside of exceptional instances of rebuilding, like the main hall of Jōdōji²⁷⁰—was effectively dead.

The circumstances surrounding the re-erection of Tōdaiji make it clear that the architectural style there used was imported from China. Japanese architectural histories habitually ascribe its adoption to the acquaintance with Sung methods gained by Chōgen on his pilgrimage, or even assert that it was his own creation, formed in part of the Chinese practises which he had seen and approved, and for the rest an original adaptation to Japanese needs. To an outsider there may be some small element of improbability in the supposition that a pilgrim, going to China without foreknowledge of his future importance in architectural history, should in one year in addition to his necessary devotions have been able to master a complicated and completely unfamiliar method of building, which twenty years later he had the opportunity to apply.²⁷¹ It may seem more likely that the

The *sūtra* repository was dedicated in 1198/3. (Cf. Daigoji texts quoted under this head in the *Dainihon-shiryō* 史料, iv/5, pp. 44 ff., for Kenkyū 6th, 11/7).

²⁶⁹ See below, pp. 256-7.

²⁷⁰ See below, p. 252 and note 435.

²⁷¹ The tradition linking Chōgen with architectural accomplishments took even more surprising forms in the Muromachi period than it does today. The standard and comparatively reliable sources are disappointingly taciturn in describing his journey to China. In the *Tōdaiji-zōritsu-kuyōki* of 1452, however (*Gunshoruijū*, *Shakkabu*, p. 406), the account of his labors over Tōdaiji is continued as follows:

"Nor was the piety of the Holy One limited to this occasion. Three times did he visit China, the first in the prime of his life. Now on the mountain of King Aśoka in the realm of Great Sung (A-yü-wang-shan 阿育王山), there is a relic hall, a holy place of two storeys and three (bays? 舍利殿二階三閣之精舍. 閣 perhaps an error for 間?). The central bay has a breadth of 30 ft, 其最中一間弘三丈也从 which may be imagined the impressiveness of the holy place. Through long years this had fallen into ruin, through lack of means to build. Then the Holy One, chancing upon great timbers in our own land, crossed over ten thousand *li* of sea-grown waves to search out a temple to build in China, and thus to fulfil a unique vow. Wherefore did China fashion an image of the Holy One, to be enshrined among

appreciation of Sung buildings gained by Chōgen on his journey was translated into practise by a Chinese professional, the master artisan Ch'ên Ho-ch'ing, who would hardly have accompanied him to select timbers for the Great Buddha hall if he had been merely a bronze-caster.³⁷² In the resulting style, so completely different from every previous Japanese standard, it is difficult for an outsider to see any element which could be called the contribution of Chōgen or his native architects. Wherever the truth may lie, however, it is unquestionable that the *Tenjikuyō* was brought either in its entirety or in large part from south China in the later years of the twelfth century. It becomes of interest, therefore, to see what evidence remains in China of the existence of the style.

The two chief characteristics of the *Tenjikuyō* are its design of bracketing along a single, transverse axis and its insertion of this system of bracket arms through the body of the column (figs. 113, 114). Both are quite contrary to the orthodox progress of Chinese architecture from T'ang to Ch'ing, in which the arms are longitudinal as well as transverse, and build up above the top of the column. In buildings erected with any pretense of orthodoxy, the feature of insertion is extremely rare. Bracketing along a transverse axis only is less uncommon, and thus appears frequently on the interiors of the Liao and Chin halls of the north, as well as in Korea. Neither these two nor the other *Tenjikuyō* characteristics, structural or decorative, appear in the official Northern Sung manual of architectural practise, the *Ying Tsao Fa Shih*; nor are they included in the Southern Sung style brought back to China in the thirteenth century by Zen priests who travelled in the same region as Chōgen. To the last statement one exception may be made. The Zen priest Gikai 義介, who in 1259 visited the five headquarters of Ch'an Buddhism in north Ch'ienkiang and south Kiangsu—including the A-yü-wang-ssü at Ming-chou—with the express purpose

the thrones of saints of old; and did paint the portrait of the great priest, to be a testimony for future generations . . ."

In the so-called *Namo-amida-butsu-sazenshū* 南無阿彌陀佛作善集 the story is more precise. The timbers were taken to China from Suō province (from whose mountains the columns for the restoration of Tōdaiji were secured), to wit four columns and one "rainbow girder"; and in the restored relic hall two portraits of the Japanese pilgrim and donor were enshrined, one wooden and the other painted, to be offered flowers and incense. See the article, "Shunjōbō-chōgen" by Hashigawa in *Nara 事樂* viii, 1927, pp. 35 ff. Hashigawa, on what seems to me somewhat slender evidence, dates this text in 1221. He has visited A-yü-wang-ssü in person, finding almost nothing still in existence to recall the Sung dynasty, and thinking with regret of those two portraits in the vanished 12th century relic hall. The Chinese texts regarding the history of A-yü-wang-ssü are silent on the point, doubtless through a narrow nationalistic prejudice. In the same way, and probably for the same unworthy reasons, they have remained silent concerning other historical incidents well known in Japan; for example the occasion on which Kōbō-daishi amazed the T'ang Emperor and his court by a calligraphic exhibition which consisted in writing with five brushes at once, one in each hand, one in the mouth, and one between the big and second toes of each foot. But it would be unwise to reject the story about Chōgen entirely. Kimiya 木宮 in his study of Sino-Japanese relations, *Nishi-kōtsūshi* 日支交通史, Tōkyō, 1927, has collected a number of such incidents for early Kamakura (ii, pp. 17-18). The Zen monk Eisai contributed timber from Japan for repairs to the famous Ch'an headquarters, T'ien-t'ung-ssü, in Ming-chou. Benen of Tōfukuji did the same for Ching-shan-ssü in Hangchow; and Tankai of Sennyūji is supposed to have financed and directed the rebuilding of Po-lien-chiao-ssü in Ming-chou. Japanese timber, being of superior quality, was a staple export to south China.

³⁷² It is surely significant that the *T-zōritsu-kuyōki*, listing the principals on the trip to Suō, sets the Chinese first.

of studying their architectural and ritual forms, noted down the buildings and details which he saw in a scroll, of which three copies have been preserved. In one instance, the support of a drum stand, this record shows both the *Tenjikuyō* features of transverse projection and insertion. Elsewhere everything is in the official style developed out of that of the *Ying Tsao Fa Shih* and carried for Zen use to Japan, the so-called *Karayō*.³⁷³

In parts of Chêkiang, Fukien, and Kuangtung today, there exist—or at least existed until 1937, before the prosecution of measures to secure a co-prosperity sphere in the Far East—many buildings of varying date which testify in one way or another to the former prevalence of the “Indian” style in that region. In an exceptional form like the stone pagoda, these may go back even as far as Sung itself, as is the case with the two granite towers at Ch’üan-chou, Fukien, which were reconstructed from timber originals in the thirteenth century. Unfortunately the advantage enjoyed by the pair in date is offset by their stone construction; but even the change in material has not concealed essential *Tenjikuyō* peculiarities of bracketing and beam framing.³⁷⁴ Other more modern buildings have retained many vestiges of the style. What little investigation has been made in the coastal region suggests that the focus of the tradition may be located in Fukien. In such architecture as that of the Buddha hall of Wan-fu-ssü 萬福寺 in Fu-ch’ing-hsien 福清縣, or that of the halls and gates of Ch’ung-shêng-ssü 崇聖寺 in Min-hou-hsien 閩侯縣, most of the elements familiar through Japanese use are still visible.³⁷⁵ Bracketing is limited to the column axes only, and on these its arms project through the columns, in the transverse sense. The first-mentioned building uses a single longitudinal arm as the last tier in the system (fig. 122); a slackening of principle which Japanese practise also condones.³⁷⁶ As in the *Tenjikuyō* proper, the bearing-block is finished below by a projecting member reminiscent of the Asuka plate; while the ends of the rafters are concealed by a board fastened to the edge of the eaves. These are clearly only the latest versions of a provincial tradition which has maintained itself without radical changes for five hundred years against the assaults of orthodoxy; and which, in view of its stubborn conservatism, may well have existed in much the same form long before the twelfth century.

It is interesting to note that the monastery of Wan-fu-ssü was the source from which the last Zen sect came to Japan at the close of Ming. The mountain on which it stands, Huang-po-shan 黃檗山, furnished the name “Ōbakusan” to the school in Japan. The headquarters of Ōbakusan at Mampukuji 萬福寺, near Uji, present many architectural features of the existing Wan-fu-ssü buildings which are common to the south China coast. The hall of the Law, Hōdō 法堂, for example, uses transverse, inserted bracket arms; not by way of survival from the original Japanese *Tenjikuyō*, which had long since disappeared, but by reintroduction of a later Chinese phase of the style.³⁷⁶

Reminiscences of *Tenjikuyō* are considerably less frequent in Chêkiang today than

³⁷³ See below, pp. 224 ff. and note 385. The drum-stand is shown in *Bull. of the Soc. for Research in Chinese Archit.*, iii/3, fig. 11, pp. 88-89.

³⁷⁴ Ch’üan-chou: cf. Ecke G., “Structural Features of the Stone-built T’ing Pagoda,” *Monumenta Serica*, i, 1935-36, pp. 254 ff. Wan-fu-ssü: cf. Tokiwa, commemorative volume 記念集 of *Buddhist Monuments*, Tōkyō, 1931, pp. 260 ff., pl. 145. Ch’ung-shêng-ssü: *do.*, pp. 199 ff., pls. 99 ff.

³⁷⁵ See below, p. 219.

³⁷⁶ See below, p. 286.

in Fukien; and to judge from the picture scroll made by Gikai, the style existed there in the thirteenth century—at least in Ch'an monasteries—only in a very minor, decorative position. It is possible that the Ch'an sect, then at the height of prosperity through Imperial favor, possessed a more official type of architecture in its Chêkiang headquarters than other branches of Chinese Buddhism like T'ien-t'ai. The latter, less intimately connected to the Southern Sung court at Hang-chou, may have reflected that unfashionable state in buildings of a provincial flavor. Possibly Chōgen visited Fukien as well as Chêkiang, became familiar with both styles, and for the re-erection of Tōdaiji chose not the official—already fussy and over-elaborate—but the bolder and more simple. Perhaps he acquired in China merely an appreciation of Things Chinese, and twenty years later fell by chance upon an artisan newly arrived from Fukien, whom he employed not with any balancing of one style against another but because he was the one available Chinese master.

The name "*Tenjikuyō*," the "Indian" style, has usually been explained as a traditional misnomer based on unfamiliarity. The source of Zen architectural practise in the Ch'an temples of south China was well known in later Japan, and earned it the title "*Karayō*," or "Chinese" style. Its competitor, appearing suddenly by an individual decision and dying out only a few generations after the death of its sponsor, had the mystery of the unknown and inexplicable, as well as the strangeness of what must later have seemed a half-barbarous form; it was referred, naturally, to the home of all Far Eastern mysteries, India. An alternative explanation has been made by Dr. Gustav Ecke, that the reference is rather to one of the Ch'an head temples at Hangchou, the Chung-t'ien-chu-shan 中天竺山 (in Japanese Chu-tenjiku-zan), from whose late twelfth century buildings the style may have been imitated. Unfortunately, only a general ground-plan of this establishment is given in Gikai's scroll, so that the theory is impossible to prove or disprove by such evidence. In general, however, the scroll shows in other Ch'an temples—including another, Ching-shan 徑山, in Hang-chou—a fully standardized, orthodox architecture and decoration.²⁷⁷ It is conceivable that this official manner was imposed on them in the 85 odd years between the visits of Chōgen and Gikai, but hardly probable. Hang-chou in particular, as the seat of the court, must have been throughout the Southern Sung period the chief focus of a governmental style as highly organized as that of the *Ying Tsao Fa Shih* from which it was doubtless derived; that one of its foremost temples should have used instead an entirely different provincial tradition is almost unthinkable. Under these circumstances it seems to me that the old interpretation, of a complete ignorance of source, is the preferable one.

An analysis of the elements of *Tenjikuyō*, based on its three earliest and purest Japanese examples, follows.

PLAN AND CROSS-SECTION:

The re-erection of Tōdaiji, carried out in conformity with an earlier ground-plan, excluded any illustration of possible *Tenjikuyō* peculiarities in this branch of design. The Nandaimon stands on what must be its column bases of the Nara period (fig. 118). The

²⁷⁷ Cf. *Bull.*, iii/3, figs. 6, 7, 11, 12.

Jōdōdō belongs to the typically Chinese chancel-and-ambulatory class (fig. 116). The building is a square of three wide bays on a side, a proportion not found in remains following the T'ang tradition but normal in the official Sung manner adopted by Zen. The typical Zen square, however, is assymmetrically disposed, with the altar pushed to the rear and the front chancel columns omitted for greater spaciousness; here the chancel is a screened area in the exact center, with all its four columns intact, a more primitive plan comparable to T'ang in its symmetry.

The *sūtra* repository of Kami-daigo consists of one large room, three bays by two, containing *sūtra*-cases in the form of a small building at its center; and a fore-room one bay deep across its front, covered by a prolongation of the main roof (fig. 115). This is an assymmetrical plan, certainly, and may represent a Japanese contribution to the style, based on many generations of familiarity with the principle of the *raidō*. The same sort of plan is perfectly possible in China, however, whether the fore-hall be covered by a lean-to roof or by its own gable; and thus as a common property of both traditions requires no more discussion.

The *Tenjikuyō* cross-section is naturally completed by the single-shell roof, with visible supports, of inveterate Chinese custom. All three examples illustrate this, having escaped re-roofing in the Japanese manner perhaps because their unfamiliar structural methods discouraged later meddling. The alien quality of such construction in mediaeval Japan makes all the more remarkable the hold which it seems to have acquired over Tōdaiji carpenters. Its use in work for the temple was continued for several generations after the first stage of rebuilding had been completed, and after other features of the style had been supplanted by elements more congenial to Japanese taste. Thus it appears not only in the *raidō* of the Hokkedō³⁶⁹—where it was necessary, to conform with the Chinese roof of the Nara period nucleus—but also in such mature Kamakura buildings as the Chōzu-no-ya 手水屋 or holy-water shelter east of the Hokkedō, and the Busshō-no-ya 佛餉屋 or food-offering building; and it probably existed also in the Muromachi period bath-house, before the latter's modernization.³⁷⁸

The roof framing of the *Tenjikuyō* follows the same principles as that of the T'ang style, or even of the Ch'ing, but is more complicated; introducing minor beams for more secure bracing between the main girders. These are perhaps a substitute for the slanting purlin braces typical of earlier continental practise, but not found in the *Tenjikuyō* or in the official styles from Southern Sung on.

It should be noticed, as a feature indispensable in pure "Indian" style practise, that its outside eaves columns continue almost all the way to the roof, and so hold the wall purlin above them by a single bracket. In the case of the great south gate, this method entails the use of extraordinarily large column timbers, approximately 65 feet high (fig. 118). Those of the vanished Daibutsuden were half again as high.³⁶⁶ It is obvious that such a structural tradition could flourish only in a land of great forests. On the continent, therefore, it has remained a peculiarity of the south coastal provinces, and has never been attempted in the arid north. Even in densely wooded Japan, an extraordinary effort was

³⁷⁸ Chōzu-no-ya: cf. *Kokuhō-kenzōbutsu*, ii/7.

necessary to find a stand of timber large enough to supply the needs of the "Indian" style Tōdaiji.³⁶⁶

BRACKETING:

Two major principles apply to all pure *Tenjikuyō* columnar bracketing. The arms—described literally as *sashi-hijiki* 指肘木—are inserted in tiers through the body of the column, instead of building above its top; and where the size of the building makes it possible, they run in a transverse sense only, each projecting beyond the one below and in turn holding a longer arm above. In the Tōdaiji gateway, where the system is applied in extreme form, there are six steps of projection; the excessively wide overhang requires two purlins outside the wall, which are held by a total of ten arms, one above the other (figs. 113, 118).³⁷⁰ At this great scale, or at that of the Jōdōdō (where the intercolumnar span is around 19 feet), a single longitudinal bracket is permitted at the top of the transverse series, to give a better bearing for the purlin. The same sort of member is used in the Buddha hall of Wan-fu-ssū. It is omitted, as unnecessary, in the smaller Chinese gates, and also under the penthouse of the Kami-daigo *sūtra* repository (fig. 119). The lateral strength lacking in such a system is supplied at Tōdaiji—where it is most needed—by tiers of bracing beams, running the whole length of the facade and so tying together the transverse bracket complexes.

The peculiar height and narrowness of the Tōdaiji gateway makes its bracketing a problem chiefly of supporting the eaves, and to a much less extent one of holding the interior girders. Thus in cross-section the system seems very one-sided; and it is only the fact that every third arm is also a transverse bracing beam, running through the whole structure, that prevents this concentration of supports on the outside of the wall from being dangerous. In the other two buildings, the support of interior girders is almost as important as that of the eaves, and thus a projection on one side of the wall is skilfully balanced on the other. The system nowhere produces a mere symmetrical branching, like that of the more decorative and less logical "Chinese" style. Each arm always projects farther on one side, whether in or out; but this asymmetry is ingeniously combined with a difference of levels to effect an equivalence of stress. In both halls, the lowest two arms are completely one-sided; the first emerging on the interior in an ornamental termination, and the second merely inserted into the pillar. The rest is highly varied (figs. 115, 116, 118). In the case of the *sūtra* repository, the different heights of transverse and longitudinal beams crossing the main room produce different interior bracketing systems on the rear and end walls; while the front, under its low penthouse, has a third system of its own. All this complicated visible juggling of weights and levels, characteristic of Sung carpentry at a height of technical skill, stands in broad contrast to the Japanese tradition which it superseded, in which every visible combination for support is of the utmost simplicity.

A detail of bracketing typical of the *Tenjikuyō* is its use of a projecting moulding, *sarato*, at the bottom of the bearing-block. Reminiscent of the Asuka form, this is some-

³⁷⁰ Cf. Amanuma, *Zūroku*, Kamakura vol. ii, pp. 134-44, for the Tōdaiji Nandaimon.

what different in appearance, for the upper part of its projection continues the curve of the moulding above; in the earlier style, the *sarato* is horizontal on top, and interrupts the moulding as if it were merely fastened against it (figs. 113, 114, 119). This feature has been the most popular of all "Indian" style innovations in Japan, and as such has remained in use to the present day. Somewhat shrunken, it is visible also in the Ch'ing descendants of the style in Fukien, Kuangtung, and Nagasaki (fig. 117). There is no special *onito* block for the corner bracketing system, a normal one being used either parallel to the others or at 45 degrees. The groups of blocks between superimposed bracket arms are not necessarily set out on strict vertical axes above each other—as is usually the case in the "Japanese" and "Chinese" styles—but may vary to one side or another, with a kind of rustic freedom typical of the effect of the whole building.

The one noticeably decorative feature of a style otherwise wholly architectonic is its ornamental termination of certain members, such as those which project through columns and are not needed for any structural function on the other side. The timber so treated may be either a bracket arm or a beam; its end, *kibana* 木鼻, is cut off on a downward slant in a series of simple mouldings.²⁸⁰ By what may be either a coincidence or a lingering memory of Gandhāran influence, this contour in the Jōdōdō has precisely the curved elements of a Greco-Roman cornice turned upside down, a combination of Lesbian and Ionic cymas (fig. 120). The same sort of treatment is typically given to the end of the intercolumnar lever arm (to be considered below), and to either side of the *kaerumata*-like member which serves as its fulcrum in the wall plane. In the Tōdaiji gateway, the two bracket arms directly below the eaves purlin are cut off at opposite angles, the upper slanting down and the lower up, so that together they seem to form a symmetrical decorative unit. By a final development of the idea, the great diagonal beams which hold the corners of the eaves are each cut out at the end in a wide fork, in which the insides of the prongs have the same sort of reciprocal mouldings (figs. 113, 118).

In the case of comparatively narrow purlin spans, like those of the *sūtra* repository and the corner bays of the Tōdaiji gate, no intercolumnar support is provided. Wide bays are allotted a unique version of the lever arm, *odaruki*. In the middle Tōdaiji bays and at Jōdōji this is a long timber, strengthened by a shorter, parallel arm between it and the fulcrum (figs. 114, 116, 118). The outer end butts directly against the underside of the eaves purlin, and the inner beneath the first interior purlin. The lever system is here fully applied—as it had not been in Asuka and Nara—while retaining a simplicity far greater than in its use by the official Sung style. At Jōdōji an identical intercolumnar lever is used over the chancel column plane as well, to balance the thrusts of the purlins on either side. In the wall plane, the upper surface of the arm supports the wall purlin; while the subordinate lower arm rests on a fulcrum block which transmits the weight to a longitudinal beam.

The principle is highly logical. On the column axes, the support of both exterior and interior purlins is possible by a combination of horizontals and verticals alone; outside by the eaves bracketing, inside by the aisle beams and the posts above them. Between

²⁸⁰ Cf. variant forms illustrated by Kawakatsu, *Kokenchiku-nyūmon*, figs. 33-6 and p. 68; Amanuma, *Shiyō*, pl. 107.

the columns, it is possible to support the eaves purlin by a duplication of the bracketing used over the column heads; this is the method applied normally in Sung practise. The aisle purlin is farther away, however; and on the intercolumnar axis, where no beams cross the aisle, it can be easily held up only by the long slanting lever arm.

In contrast to both other styles, the *Tenjikyō* rafters emerge in a single tier only. No soffit boarding conceals them above the brackets; but a long board runs along the edge of the eaves, the *hanakaku-ita* 鼻隠板, which hides their ends from view (figs. 113, 114). Either above or close to the corner column, the rafters begin to be set on radii rather than on transverse axes, and so fan outward until they finally run parallel to the diagonal axis of the corner eaves beam.

BEAMS IN THE WALL PLANE:

As in all remaining buildings known to me in China, only column-piercing beams are used. The enclosing beam typical of Japanese practise is entirely absent.

COLUMN BASES AND PLATFORMS:

The Tōdaiji gateway, being a re-erection, stands on its old stone platform and pillar bases.

The two halls mark successive stages of an adaptation of the imported style to native habit. In the Kamakura period, flooring material provided a crucial index of architectural character—as it does today, when all the contrast between indigenous and foreign styles, and the wide extremes of use and behaviour which these suggest to the Japanese mind, may be summed up in the difference between a Japanese floor of matting (on which one follows a clean, ordered, and beautiful tradition of life) and a “western” floor of wood or concrete (on which one throws cigarette butts and tangerine peels, and lives as a citizen of the modern, industrialized world). It is natural, therefore, that the first concession made by the “Indian” style to Japanese preference should have been in a matter so closely bound to actual conditions of use.

At Kami-daigo the terrace is of stone (without any formal facing), but the floor inside is wooden. The difference in level is considerable, and provides a space beneath the floor boards through which a free circulation of air is permitted by latticing around the bottom of the walls. This is a modification of the raised floor, entirely open beneath, of the old *Azekura* storehouse; and in the same way denotes a precaution against earth dampness equally necessary in Japan and in south China. At Jōdōji there is a wood verandah as well as a raised wood floor, but no railing.

Column bases are merely utilitarian.

DOORS AND WINDOWS:

The doors of the Jōdōdō are later replacements in the “Chinese” style. Those of the small building inside the *sūtra* repository—the actual *sūtra* case, in architectural form—are originals, while the exterior doors of the repository proper are modern imitations. In contrast to the flat-surfaced board doors, *itakarato*, of the “Japanese” style, these are panelled *sankarato* 棧唐戸. The design is extremely simple, a square panel at the top

filled with reticulation, and three rectangular areas below; the subdividing strips are simply moulded. Instead of fitting between a widely projecting frame, the door is flush. On the outside edge of each valve is fastened a post serving as the pivot, which fits at top and bottom into a projecting socket-block. This last feature, called *waraza* 葦座, is characteristic of both styles imported from China in the Kamakura period, as an inevitable concomitant of the panelled door. Its form in the *Tenjikuyō* is a narrow, deep, horseshoe-like curve, the contour diversified by a shallow moulding. In the Kaisandō of Tōdaiji, erected probably a generation later than the first period of rebuilding and already nationalized in some of its elements, the doors are still good *Tenjikuyō*.²⁸¹ The panelling there involves a more elaborate combination of areas; horizontal oblongs at top, middle, and bottom, and vertical oblongs divided by a central frame, between. The panelling strips are triangular in section.

No windows in the strict sense of the word are used in these monuments. In the *sūtra* repository, instead, a sort of open frieze, divided by slats, runs around ends and rear, corresponding to the same sort of openwork below the floor, and intended in the same way to permit circulation of air (figs. 115, 119).

ROOFS:

The Tōdaiji gate and the Jōdōdō are covered with tiles. The *sūtra* repository at present has a shingled roof. This is probably a result of later repairs, since the Chinese character of the style demands tiling; and in addition, two out of three of even the Heian storehouses of Daigoji had been tiled as a special protection against fire.²⁸² No original roof ornaments remain. The roof slope is between 30 and 35 degrees; slightly higher than that of the Hokkedō of Tōdaiji as a representative of eighth century style, and approximately the same as that of the Chin monuments of Ta-t'ung-fu, which must reflect Northern Sung practise.²⁸³

INTERIOR BEAMS AND INTER-BEAM SUPPORTS; THE GABLE FIELD:

The *Tenjikuyō* "rainbow" beam is markedly rounded in cross-section, unlike those of the other two styles, so that it approaches either an oval or a circle, with flattened top and bottom. Like the form typical of Heian, it is horizontal through almost all of its span, curving down suddenly at either end to fit the smaller scale of the bracketing. Its under surface is decorated by a shallow sunken panel, closed at each end by a half quatrefoil (fig. 120).

²⁸¹ Cf. Amanuma, *Zūroku*, Kamakura vol. ii, pp. 145-52; *Kokuhō-kenzōbutsu*, ii/1. Only stylistic data is available for this building, since the temple tradition that it represents a rebuilding of 1019 is obviously erroneous.

²⁸² Cf. the inventory in the *Daigoji-zōjiki* quoted by Fukuyama in "Tendai Shingon," *Bukk-kokogaku-kōza*, iii.

²⁸³ Cf. the schedule of Ta-t'ung roof slopes given in the Ta-t'ung monograph, *Bull.* iv/3, 4, pp. 157 ff. Both Chinese and Japanese roofs have shown tendencies toward an increase in slope from the 8th century on; the latter being the more marked because of its double construction. At Ta-t'ung the Liao buildings have slopes varying between 24 and 28 degrees; while those of Chin show an abrupt increase to around 33.

Between the beams of the two *Tenjikuyō* halls are set squat round pillars, the same size as the main columns standing below, instead of *kaerumata* and brackets. The substitution is typical also of the official Sung style in Japan. Its effect is to separate more widely the tiers of beams supporting the roof. In the Jōdōdō, these high intervals are left undisturbed, and give a striking impression of boldness; at Kami-daigo, as if in distrust of the stability of such a system, smaller bracing beams are introduced between the main girders. Of this construction, in which a form like a king-post is used for all inter-beam supports, there is no mention in the *Ying Tsao Fa Shih*, nor any sign in the Liao and Chin remains of north China. With square posts instead of round, it occurs in two buildings of Lung-hsing-ssū in Chêng-ting-hsien of probable Sung date, the Mo-ni-tien and the Tzū-shih-ko. Still farther south, it was found in the main hall of Pao-shêng-ssū 保聖寺 in Su-chou, apparently datable as early as 1013, before that temple's recent destruction; the post there being so low that the beam interval was no greater than would be the case if a *kaerumata* were used instead (fig. 146). The practise came to Japan with both imported fashions from the south; what little evidence is available on the continent suggests that it was a specifically southern feature, perhaps originally so provincial that it was not admitted to the architectural code of the Northern Sung at K'ai-fêng, and received official acceptance only after the removal of the Court to Hang-chou. A photograph of the interior of the Ch'ing dynasty Buddha hall of Ch'ung-shêng-ssū in Fukien—one of the buildings still strongly *Tenjikuyō* in other respects—shows the same basic framing system of high posts and widely separated beam tiers, strung together with a boldness recalling that of the Jōdōdō (fig. 121). In the Ming and Ch'ing official style of the north, posts are used, but the beams are close above one another, and give the opposite effect of ponderous caution.

The *Tenjikuyō* inter-beam pillar, *enzuka* 圓束, has a characteristically simple form which distinguishes it from that of the Zen style. The pillar is a cylinder; and while its bottom edge overlaps the beam to a slight extent, this termination is given no special decorative treatment.

The single remaining gable field is that of the Tōdaiji gateway, where only the king-post and the beam on which it stands are exposed. The same sort of forms are found in the gable on the south facade of the present Hokkedō, dating a generation or so later; and there seem clearly to prove that a roof of the present type has been in existence since the thirteenth century.²⁶⁹

ADDENDA:

Neither ceilings, canopies, altar platforms, railings, nor any kind of decoration have been preserved in *Tenjikuyō* buildings.

²⁶⁹ Cf. *Bull.* iv/2, figs. 3, 4, 33-5 (Chêng-ting Hsien). For Pao-shêng-ssū, the monograph by Ōmura Seigai, *Soheki-zankei* 塑壁殘景, Tōkyō, 1925. According to the *Wu Chün Fu Li Chih* 吳郡甫里志, the temple was founded by Liang Wu Ti in 503, and was rebuilt in 1013; a date which seems to accord with the early style shown by Ōmura's photographs. I have been told by Dr. Gustav Ecke that several years ago the main hall was destroyed by the owner of the property on which it stood, apparently because he was afraid that rising interest in the building would reveal the fraudulence of his title.

The sum of all the elements discussed above, and the conspicuous lack of ornamental features mentioned in the last section, indicate the qualities essential to the style: solidity, boldness, imposing scale, austere simplicity, and a kind of naive awkwardness. In these provincial virtues lie the greatness of the *Tenjikyō* and a reason for the brevity of its career in Japan. Such qualities were far from the aesthetic ideal of the aristocracy which had built the Hōōdō and Konjikidō, and whose tastes still dominated much of Kamakura culture. By an odd paradox, they were apparently unacceptable, as well, to the new military class, which, professing to admire strength and austerity, yet gave its patronage to the Zen style, in comparison feminine and overcomplicated. At the height of its prestige, the *Tenjikyō* may have encouraged similar virtues in the thirteenth century revival of temple building in the traditional Japanese manner. From late Kamakura on, the main current of temple architecture resumed the normal preoccupations from which it had been briefly diverted. Neither of its two chief interests—the provision of a larger enclosed area for public worship, and the elaboration of sculptural ornament—could be served by the *Tenjikyō*; and thus the latter survived only in the very few details capable of decorative use.

THE "CHINESE" STYLE OF ZEN, KARAYō

It seems probable that the Zen sect, first officially recognized at the very beginning of the thirteenth century, was not equipped with any distinctive style of temple architecture until a generation or more later. The first temple erected by its pioneer propagandist, Eisai—Jufukuji 壽福寺 at Kametani in Sagami Province, authorized by the Kamakura Regent Lady Masako in 1200—can hardly have been more than a simple rustic retreat. Its earliest metropolitan establishment—Kenninji 建仁寺, founded in Kyōto in 1202—was no more than partially Zen, sharing its quarters with precincts specially dedicated to Shingon and Tendai ritual. As late as 1236 the same spirit of syncretism and ecclesiastical diplomacy seems to have governed the erection of Tōfukuji 東福寺 in Kyōto, at which it was intended that "all doctrines should be studied together."³⁵⁵

The rise of Zen to independence at the middle of the century was due in large measure to the arrival in Kamakura in 1247 of a Chinese missionary of great ability and persuasiveness, Tao-lung 道隆. Through the favor won by this monk from the Regent Hōjō no Tokiyori, he was appointed abbot of the first major Zen monastery in Kamakura, Kenchōji 建長寺. The latter was completed in 1253 on a scale appropriate to the prestige of its founder, and according to tradition was built in imitation of one of the Ch'an headquarters at the Sung capital, Hang-chou.³⁵⁶ In the same year, Gikai, a Japanese monk greatly in-

³⁵⁵ Cf. "A Study of the Daitō-gozanzū" 大唐五山圖 (i. e. of the pictures of the buildings of the five Ch'an headquarters in China), by Tanabe Y., translated into Chinese by Liang Ssū-ch'êng, *Bull.* iii/3, pp. 85 ff.; and the same author's "Zenshū no Jiin-kenchiku," *Bukk-kokogaku-kōza*, i, pp. 4 ff.; also Hattori, *N-kokenchikushi*, Kamakura vol., pp. 45 ff.

³⁵⁶ Kenchōji texts are collected in *Kōji-ruien*, *Shūkyōbu* iv, pp. 272 ff. The dedication in 1253/11/25 is recorded in the Shogunate record *Azuma-kagami*, xliii. *Kōji-ruien* quotes an early Edo text—the *Kanahōkō* 寒松稿, collected writings of the scholar Matsudaira Yasuzumi 松平康純, first quarter of the 17th—to the effect that Kenchōji's architect was sent to China to study the buildings of Chin-shan-ssū 金山寺 (Kiangsu, Chên-chiang-fu 鎮江府) by the Regent Hōjō no Tokiyori. Tanabe in his "Zenshū," p. 44 cites

terested in monastic organization, fell heir to a high position in the sect at the death of his master Dōgen 道元. His preoccupation took him first to the Zen temples of Kyōto, to observe the usages of each; in 1259, as if dissatisfied with existing Japanese standards, he sailed to China. "He ascended to the monasteries on Ching-shan (Hang-chou) and T'ien-t'ung 天童 (at Ming-chou), and at the same time paid visits to celebrated high priests. What he saw and heard of the 'groves' (i. e., of the monasteries) and their rites and music, he drew and noted down. Then (after four years) he returned to Eihei (ji 永平寺 in Echizen). Sending out a great call to those destined to good works, and straining strength to exhaustion in the administration (of his project), he for the first time put into complete order all Zen monasteries that existed." I have mentioned in the previous section the scroll record, preserved in three copies today, which though unsigned seems to stem from Gikai's travels in China.²⁸⁷ In this a large number of awkward but careful drawings, provided with copious notes, describe the architecture and ritual furnishings of the great Ch'an headquarters in Ch'ekiang, Kiangsu, and Fukien (figs. 123, 124). There are ground plans of whole monastic establishments and diagrams of seating arrangements used in ceremonies, elevations of buildings, cross-sections which show the relationships of brackets and beams, details of *sūtra* cases, altar platforms, thrones, musical instruments, canopies, name tablets, screens, incense burners, bells, drums, etc.—everything which an inquisitive and industrious student might have admired at the sources of Dhyāna Buddhism, and wished to transplant in his own country. The biography of Gikai, indeed, suggests the efforts he expended on his return to establish similar standards of architecture and ceremony in Japan. A generation later, as if this second-hand fund of information had not been sufficient, it is said that the Regent Tokimune actually sent a master artisan to China in 1279 to study the building practises of Ching-shan in Hang-chou. On the return of this emissary, he erected the celebrated Engakuji in Kamakura (from which the relic hall, or Shariden, remains as the earliest survivor of the Zen style) to house another Chinese monk, Lan-hsi, 蘭溪.²⁸⁸

All this evidence places beyond question the source of Japanese Zen architecture—the so-called "Chinese style," *Karayō*—in the building methods of the Southern Sung capital district. As we shall see below in a detailed analysis of the elements of the style, most of its features may be traced back to the continent, not merely on general historical grounds

a temple tradition that the model was the equally famous Ching-shan 徑山 at Hang-chou. I cannot explain the discrepancy, which may be due in part to a confusion with the slightly later Kamakura monastery of Engakuji (cf. note 388). Chin-shan-ssū is shown in its 15th century state in a painting by Sesshū in the Asano collection; cf. Jon Covell, *Under the Seal of Sesshū*, New York, 1941, pl. 10.

²⁸⁷ Gikai and the scrolls attributed to him are treated in the two articles by Tanabe cited above; also by Itō Chūta in his *Tōyō-kenchiku no Kenkyū*, i, pp. 533 ff. (Tōkyō, 1936). The quotation is from his biography in the *Honchōkōsōden* 本朝高僧傳 xxi, of 1702.

²⁸⁸ Engakuji's history is summarized by Tanabe in "Zenshū," pp. 47 ff. Texts in *Kōji-ruien*, pp. 277 ff.; where the *Kanshōkō* is quoted in precisely the same language as in the case of Kenchōji to state the Regent—now Hōjō no Tokimune—sent an architect to China, now to Ching-shan-ssū in Hang-chou, to study Sung building practises before he began the erection of Engakuji. Japanese authorities on architectural history quote the tradition about Engakuji as if it were a fact, but normally do not mention any parallel, earlier case for Kenchōji.

and the evidence of Gikai's record, but by their presence as well in the remaining Chinese monuments of the same period. What is of interest beyond this relationship of source and imitation is the fact that Zen architecture in Japan represents only a portion of the Chinese repertory. Descriptions of temples like those of the pilgrim Jōjin, the explanations and drawings of the *Ying Tsao Fa Shih* and Gikai's scrolls, and extant buildings dated in or attributable to Sung contain many forms which apparently were never adopted in Japan, for all their popularity in China. Gikai, for example, illustrates a four-storeyed bell-tower from Ho-shan-ssū 何山寺 (in An-chi-hsien 安吉, Chékiang), one of the class of lofty, multi-storeyed erections often mentioned by Jōjin (fig. 123); so far as I know, nothing of the kind was ever imitated in a Japanese Zen monastery. The same is true of his facade of the Buddha hall of Chin-shan 金山 in Kiangsu; the ground floor here is opened in a sort of pseudo-arcade often reproduced in later Chinese architecture but never seen in Japan.²⁸⁹ No matter how illustrious the precedent behind such practises, it is obvious that they were considered either impossible to build or incompatible with Japanese taste. This selectivity, so strongly in contrast with a general enthusiasm of imitation, marks the strength of the habits of taste formed by the Japanese in six centuries of temple building; habits which after the Kamakura period were to harden into an obstinacy permitting almost no further influence from abroad.

The Zen style in Japan, due to its early standardization by leaders like Gikai and the persistent conservatism of the sect, presents not only at any given period but throughout its course an almost monotonous homogeneity. The type which holds good for monuments of late Kamakura and early Muromachi appears unchanged, except for minor proportions and ornamental details, a century or two centuries later. Whatever the merits of such a complete lack of progress may be from the standpoint of general architectural history, it has had the archaeological advantage of preserving almost without major changes the original appearance of several Zen monasteries, whose original buildings have long since disappeared. Thus in the great Kyōto establishments of Daitokuji 大徳寺 and Myōshinji 妙心寺 although the actual halls and gates of the nuclear groups are no earlier than Momoyama, their general forms and their plan relationship must be very like those of the first erections on each site. This fixation of standards is of course in the strongest contrast to the process of evolution incessantly at work in the "Japanese" style, and to a lesser extent even to the limited variety of the *Tenjikuyō*. Its only parallel in the Far East is the almost complete immobility of Peking architecture from the fifteenth century to the nineteenth, under the Ming and Ch'ing.

One exception should be noted to the otherwise general dominance of the *Karayō* in the monumental architecture of Zen monasteries. The imposing "triple" gate, Sammon 三門, of Tōfukuji in Kyōto, although orthodox in its general outlines, is constructed in a fashion strongly influenced by the *Tenjikuyō*, with the latter's prime feature of inserted bracket-arms.²⁹⁰ This marked divergence is probably due to the history of the temple, which was first established by the high minister Fujiwara no Michiie 道家 in 1236, and was completed in 1255. At that period, just before the sudden prosperity of Zen in Kama-

²⁸⁹ See in *Bull.* iii/3, figs. 9, 8, respectively.

²⁹⁰ Cf. Amanuma, *Zūroku*, Muromachi vol., pp. 22-40; Tanabe, "Zenshū," p. 43.

kura, the sect seems to have possessed neither fixed standards nor any intimate connection with the parent-monasteries in China; and so Tōfukuji may very well have been built at the outset in a Kyōto version of the still influential *Tenjikuyō*. The temple is said to have received major restorations in the Ōei period (1394-1427) under Ashikaga Yoshimochi; whether the "triple" gate was rebuilt then, or was largely reconstructed with some of its original materials, the influence of its first style must have been strong enough to prevent any adoption of the pure *Karayō*.

It should be understood, again, that the latter style holds good in only a limited portion of the typical Zen monastery, its nucleus of monumental halls and gateways. For the residences and less formal places of worship which with their gardens occupy by far the largest part of the whole grounds, the building methods used are purely Japanese, in the picturesque and informal manner brought to perfection between late Heian and Momoyama. It is very likely that this distinction has existed from the start.

THE ZEN TWO-STOREYED GATE, SAMMON:

The Tōfukuji "triple" gate, in spite of its irregularity of structural details, conforms to an architectural type apparently not known in Japan before the introduction of Zen, and almost exclusively monopolized by the sect thereafter. It is so named because of its three openings, being usually five bays wide by two deep. It is two-storeyed; the upper storey is not merely for external impressiveness, as it had been at Hōryūji, but is floored, contains images—usually of Kannon and the Rakan (羅漢 Lo-han, or Arhats)—and is reached from the ground by a staircase on each end, which starts from a small, detached pavilion (fig. 125). The main south gateway of the Yüan dynasty Imperial palace at Peking, to judge from its description, must have had somewhat the same combination of forms on a much larger scale:²⁰¹

"The main south (gateway) was called Ch'ung-t'ien 崇天. Twelve bays with five openings, it was 187 feet from east to west, 55 feet from north to south, and 85 feet high. On left and right it was flanked by two crenellated towers, from which one ascended to the gateway (top) by two slanting corridors, of ten bays (each) . . ."

GENERAL MONASTERY PLAN:

In first-class Zen monasteries in good preservation, four major building elements stand along a central axis: from front to rear the Imperial messenger's gate, Chokushimon 勅使門, the "triple" gate, Sammon 三門 or 山門, the Buddha hall, Butsuden 佛殿, the Dharma hall, Hattō 法堂. In front of the first gateway, or between the two, is usually a lotus pond, of doctrinal value as a place into which captured fish may be released. Back of the last hall is the entrance to the abbot's quarters, Hōjō 方丈. Buildings of various sorts—the *sūtra* repository, bell and drum pavilions, bath-house, privy, the entrances to minor precincts—stand on either side of the nuclear group, without any formal symmetry. The axis, on an open site, usually runs north-to-south; but the rule is not invariable, as large a

²⁰¹ From the mid 14th century *Chuo Keng Lu*, xxi (quoted in *T'u Shu Chi Ch'eng*, xxxii/48, 宮殿部彙考 5/19) 十二間五門...左右垛樓二垛樓登門兩斜廊十門。

temple as Nanzenji 南禪寺 in Kyōto facing west. In the hills around Kamakura, a strict axis may be impossible; thus Kenchōji follows a long curve, up the floor of a valley.

Gikai's drawings show that this typical Japanese layout represents an adoption of the more or less minimal plan elements of the Ch'an monasteries of Southern Sung. Several of his ground-plans are considerably more elaborate. That of Ling-yin-ssū 靈隱寺 at Hang-chou goes from front to rear in this sequence: "triple" gate; court flanked first by two towers, then by drum and bell pavilions; Buddha hall; hall of Vairocana; Dharma hall; front abbot's quarters; abbot's quarters; meditation hall.³⁹² There are usually more elements in the Chinese originals; the symmetry is stricter, including the abbot's quarters, which in Japan is a building of residential type only vaguely related to the axis; and among the various plans illustrated by Gikai there is actually much less standardization than in Japan. In the last point lies a general lesson which may well be applicable at an earlier period, in the relation between the T'ang style and its imitation in Nara.

It should be noticed that this axial layout does not include one element which previously had been indispensable, the pagoda. Pagodas were frequently erected in Zen monasteries (although none remains today), sometimes at an imposing scale. As in the case of one whole class of temple plans in China, however, their placing seems to have borne no relation to the nuclear group. That of Kenchōji was actually some distance to one side at the rear. The majority seem to have been set up for some special purpose well after the first completion of the monastery.³⁹³ This is an unmistakable sign of loss of importance, and marks a period of transition to the later Japanese temple architecture in which pagodas were seldom built.

No surviving Zen monastery (except the much later Mampukuji) has preserved any sign of cloister corridors. These must generally have been present in the original layout. Jōjin frequently mentions such corridors; although his evidence is of a different region and an earlier period the eleventh century, it is not entirely irrelevant, since the feature is common in Chinese temple courts even today. At any rate, the dedication records of such Kyōto establishments as Shōkokuji 相國寺 and Tenryūji 天龍寺 mention corridors, *ro* 廊, which must have enclosed the main courtyard between gateway and Buddha hall, and which in such ceremonies were used in the old way.³⁹⁴

PLAN AND CROSS-SECTION:

The Zen plan, created in the service of a Chinese monastic system, is Chinese in providing for a monastic congregation only, uncomplicated by any problem of a *raidō*. Even in present-day Japan, the Zen sect has retained its original exclusiveness. Its great halls are used either by the monks alone, or are left closed and empty.

Two broad types of formal Zen icon halls exist today. The larger—typical of such first-rank monasteries as Daitokuji, Myōshinji, Shōkokuji, and Nanzenji in Kyōto, or Zuiryūji 瑞龍寺 in Takaoka—is a highly standardized version of the chancel-and-am-

³⁹² Cf. *Bull.* iii/3, fig. 5.

³⁹³ This subject has been carefully discussed by Adachi, "Kegon Stūpa in Kentyōzi" (in Japanese), *Tōyō-bizyutu*, xxxii, July, 1936.

³⁹⁴ Cf. *Gunshoruijū, Shakkabu*, pp. 229 ff. (Tenryūji in 1342), 333 ff. (Shōkokuji in 1392).

bulatory plan, supporting double eaves. For convenience of illustration, I show the outside of the last (fig. 128), as being almost interchangeable with the Dharma hall of Myōshinji, whose interior is given in figs. 127, 130; an entirely open central area, five by four, around which runs a single-bay ambulatory. The chancel, under the main roof, is covered by a flat ceiling, with a great dragon among clouds painted at its center. The aisles have exposed rafters, under a lower penthouse. No example of the type is earlier than the seventeenth century, so that its existence from the start is difficult to prove. All its elements are Chinese, however; the ambulatory is a feature also of the second hall type, to be discussed below, of which Kamakura monuments remain; and the large, flat ceiling occurs in existing Ch'an halls of south China. Presumably, therefore, it was part of the originally imported repertory.

The other class, smaller in scale, is paradoxically more elaborate both in plan and section. The building is an exact square. If it is five bays wide, an aisle, as usual, runs around the four sides, covered by exposed rafters and a penthouse. If it is only three bays square, the aisle and lower roof are omitted (figs. 126, 133, 134). In the relic hall of Engakuji, the earliest datable among existing Zen monuments, and typical of the five bay class,³⁹⁵ the altar platform stands a little to the rear of the center, backing against a partition wall between two columns on line with the rest. A flat, dragon ceiling, one bay square, is above the altar, surrounded by its own entablature of brackets and beams. Since the columns which should support the front corners of this ceiling are omitted, their function is taken by two big transverse girders, running between the columns back of the altar, and those enclosing the aisle in front. The design is a sophisticated version of the sort of plan juggling visible in Liao monuments, asymmetrical on the floor and in the lower tiers of the framing, but rigidly symmetrical above.

A remarkable development of the Engakuji plan type appears in the Muromachi period "golden" hall of Fudōin 不動院, in the suburbs of Hiroshima, erected probably in the second quarter of the sixteenth century.³⁹⁶ Inside of its exterior columns, the relic hall for spacial convenience omits two of a possible total of sixteen. In the Fudōin hall, almost a square but six bays deep instead of five, eight columns are omitted out of an interior total of twenty. What is an aisle on ends and rear becomes an open porch across the front, a device hallowed by use at least since the eighth century at Tōshōdaiji. Inside, the device of substituting long girders for columns is carried to its limit. Of the supports flanking the aisles, which hold the main roof, six out of fourteen are discarded. Throughout the "Japanese" style and in the few *Tenjikuyō* remains, the building is divided into a series of easily comprehensible rooms, each area surrounded by columns in the ground-plan

³⁹⁵ Cf. Tanabe, "Zenshū," pp. 49 ff.; Amanuma, *Shiyō*, pp. 265-8 and pls. 81-2; *Zūroku*, Kamakura vol. ii, pp. 94-103; Hattori, *N-kokenchikushi*, Kamakura vol., pp. 284 ff. No precise data is available for the date of erection of the Shariden, which some place with the first dedication of Engakuji in 1282, while others prefer 1301. The building collapsed in the earthquake of 1923, but has since been set up again as the sole survivor of the original monastery.

³⁹⁶ Cf. Amanuma, *Zūroku*, Muromachi vol. i, pp. 178-97. Temple tradition states that this building was brought over from Korea in the late 16th century. The dragon painting on the ceiling bears a signature dated 1540, which is probably the best evidence for the time of erection; but late Korean style is unmistakable and entirely unlike that of contemporary Japan, so the fable need not be considered.

remaining distinct from the rest and enclosed above by its own ceiling. This principle is partially abrogated in the pure Engakuji type, where the chancel area is covered by two different sorts of enclosure, an off-center flat ceiling, and an elaborate system of exposed rafters and bracketing surrounding it on three sides. In the Fudōin hall, ground plan and ceiling plan are completely irreconcilable. What seems to be a large room across the front has three different coverings, at different levels; and the same confusion holds for every apparently independent area elsewhere. Even the exterior is affected by this passion for juggling. The "golden" hall, five bays wide across the front, is seven bays wide on the rear; its main interior axes of support at either side of the altar are not on line with the columns of the front wall, but are carried, once again, on cross-beams.

The normally intense conservatism of Zen architecture makes it possible that such fluidity of design was a part of the original style imported from China. It was certainly a potentiality of that style, prepared for even in the Liao backwaters, and expressed in part in the comparatively conventional relationships of Engakuji. Its complete disregard of the normal Japanese unity of floor and ceiling arrangement makes it seem basically alien in idea. Too little evidence is available for any decision, however; and the whole development may as easily be one more instance of the remarkable products of Japanese assimilation.

In a hall three bays square, like that of Fusaiji, beyond the mountains west of Kyōto—traditionally an erection of 1357²⁹⁷—the ground-plan is that of Engakuji with the ambulatory omitted. In a building of such size, small scale may cause the omission, also, of the complicated cross-section features of the relic hall, the room being covered merely by a single flat ceiling. This seems to have been a matter of individual preference rather than a rule, however. The Buddha hall of Shuonan 酬恩庵 at Shintanabe between Kyōto and Nara, built according to tradition in the Eishō era (1504-20), is almost exactly the same size, but contains a full complement of dragon ceiling and exposed bracketing, like the relic hall's (fig. 133).²⁹⁸ Buildings of this class usually contain, in addition to the main block, two small protuberances from the corner bays at the rear, which on the inside are treated as small shrines, housing minor images or the spirit tablets of departed priors (fig. 152). The typical exterior treatment is that of Fusaiji, where each is covered by its own lean-to roof. By exception at Shuonan, the addition runs all across the rear facade. In larger halls, the same sort of subsidiary altars are often provided in the same position, but space permits their inclusion in the main block.

A founder's memorial chapel, or Kaisandō, in Eihōji, near Nagoya, presents a plan and section of exceptional interest (figs. 126, 129, 131, 132, 136). The building, erected in 1352 in honor of the temple's founder, Musō-kokushi, consists of three almost independent blocks.²⁹⁹ At the rear is a double-eaved sanctuary, the *shidō* 祠堂; in front, under a single, higher roof, is the room for worship, or *raidō*; between, with a low roof fitting beneath the others, is a connecting passage, the *ai-no-ma* 相之間. The rear block is three

²⁹⁷ Cf. Amanuma, *Zūroku*, Kamakura vol. ii, pp. 2-13.

²⁹⁸ Cf. Amanuma, *Shiyō*, pl. 122; *Zūroku*, Muromachi vol. pp. 59-65.

²⁹⁹ Cf. Tanabe, "Zenshū" pp. 57 ff.; Amanuma, *Shiyō*, pp. 268-71, pls. 84-5; *Zūroku*, Kamakura vol. ii, pp. 62-85; Hattori, *op. cit.*, pp. 302 ff.

bays square, with four interior columns mounting to a flat ceiling; it stands three steps higher than the rest, and has a wooden floor. The passage, covered by an open roof, is the widest of the three elements, and on the exterior runs back to overlap half of the *shidō*, adding to the latter's floor space. Both passage and forehall have stone paving. The last contains no interior columns, although it too is three bays square. Instead, two large transverse girders cross from front to rear, where they are supported by a longitudinal girder over the entrance to the *ai-no-ma*. These two, on four squat posts, hold a square of beams above them, which in turn through its bracketing frames a flat square ceiling. Around the four sides of this central treatment runs the complex system of rafters and interior bracketing which we have seen at Engakuji, Fudōin, and Shuonan, and which will be studied under its own section later.

The Kaisandō of Eihōji is celebrated in Japanese architectural history as the first instance of this three-fold combination; and hence as the ancestor of a building form—the *Gongen-zukuri*—which became highly popular in Shintō shrine and temple architecture from the Momoyama period on. It is normally considered a Japanese invention, and thus passes at Eihōji as an early sign of the radical adaptation of the Sung style to peculiarly Japanese ideas and needs. As I have already pointed out, however, striking parallels to the design exist in China, containing the same three elements with their three separate roofs.⁴⁰⁰ It is theoretically possible that the same idea might be conceived independently in the two countries; but the Zen sect in the fourteenth century is the last field in Japan where one would expect daring alterations of Chinese precedent, and it seems probable that this, also, was a part of its inherited repertory.

In Zen buildings of any size, the main block is raised noticeably higher, proportionately, than in the "Japanese" style. The comparison may be conveniently made between two halls each three bays square and approximately the same scale in plan, the Amida hall of Shiramizu as typical of late Heian and the fore-hall of the Kaisandō of Eihōji. In the former the ratio between height of wall columns and width of the facade is about 1 to 3.5; in the latter it is about 1 to 2. Greater height combined with the square or nearly-square ground-plan and the unusually high placing of the ceiling, give the interiors of such Zen halls a quality of marked verticality, a sense of piling-up from one level to the next. This passion for height is purely Chinese. In the *Karayō* it shows only as a pale reflection of the Chinese possibilities glimpsed in the multi-storeyed towers described by Jikaku-daishi and Jōjin, and the lofty three-storeyed pavilions remaining from Liao and Sung; in the towering interior of a Ming hall like that of Ta-fo-ssū outside of Peking; or in the striking verticality of Chinese altars, thrones, and images. The quality, even in pallid reflection, is very different from the equally strong Japanese passion for horizontality, which transforms every interior, no matter how spacious, into a room of domestic proportions, and makes the largest buildings seem to sprawl on the ground.

Every *Karayō* building of early date seems to have had its roof rebuilt. The change is obvious in the grotesque, top-heavy thatch which crowns the relic hall of Engakuji today; and several others had been thatched for one or more centuries before their recent restoration. All must have had tile roofs at the start, unless they were built under exceptional

⁴⁰⁰ See above, pp. 180 ff.

circumstances; tiling is standard for all first-class Zen buildings of later date, in the great Kyōto monasteries. Not one Kamakura or Muromachi hall has preserved what must have been its original Chinese roof framing, all being overlaid with the Japanese double shell. At least by mid-Muromachi, buildings were put up with a Japanese-type roof from the start. Reference to this development will be made in the following section.

BRACKETING:

Among the many peculiarities which distinguish Sung—*Karayō* bracketing from its T'ang predecessor in China and Japan, two are of fundamental importance. In the first place, eaves support is no longer concentrated on the column axes only; depending on the width of the bay, one or even two units identical with those above the columns are placed between them, resting on the wall beam. This is a decided contrast both to the intercolumnar strut or *kaerumata* of the "Japanese" style derived from T'ang, and to the complete discrepancy between columnar and intercolumnar bracketing in the *Tenjikuyō*. In the second place, the bracketing system in a hall of any size makes use of the lever arm, skilfully combined with its other horizontal elements; and the inner end, instead of being merely anchored by the interior framing, gives direct support (as in the "Indian" style) to the aisle purlin, so that it acts as a true lever, balancing equivalent thrusts on either side of its wall fulcrum (fig. 54).

Both of these innovations must have been used in China for many generations before their introduction to Japan. The first is probably the older. It is fully approved in the *Ying Tsao Fa Shih* of 1098, as a representative of official practise in the Northern Sung capital region.⁴⁰¹ In the south it was used in the recently demolished main hall of Pao-shêng-ssū in Su-chou, for which there is a record of rebuilding in 1013 (fig. 146).⁴⁰² In the north it appears earliest of all at Fo-kuang-ssū on Wu-t'ai-shan.⁴⁰³ The latter's date of 857 pushes the idea back into late T'ang, to become probably a product of the wholesale rebuilding which must have followed the destruction of Buddhist temples in the brief proscription of 845. In this first example, as in the second—the upper eaves of the Kuan-yin-ko of Tu-lo-ssū, dated 984—a complete identity of columnar and intercolumnar units has not yet been worked out; but while the latter is a somewhat simpler form, it does support the eaves purlin, and so marks a radical step beyond the two-dimensional, early T'ang system which was carried to Japan (and which survives beside the other in the ground-floor roof of the Kuan-yin-ko).⁴⁰² Similar transitional versions are illustrated in the tenth century frescoes of Tun-huang.⁴⁰³ So far as may be judged from the photographs of the Pao-shêng-ssū hall, its two unit types were identical. Even under the Liao, an exact repetition seems to have been achieved at an early date, since this appears in the *sūtra*

⁴⁰¹ *Ying Tsao Fa Shih*, iv, "General Bracketing Outline" 總鋪作次序: "The axial bay should have two units of intercolumnar bracketing; the adjacent bay and the corner bay, one each. This distribution of bracketing equalizes the far and near" 當心間須用補間鋪作兩朵次間及梢間各用一朵其鋪作分布令遠近皆勻.

⁴⁰² Cf. *Bull.* iii/2, pp. 66 ff.

⁴⁰³ E. g. Pelliot, *Grottes*, pls. cxxxvi (complex unit over the axial bay only), ccxv (apparently). Most instances in which the bracketing is recognizable show some form of intercolumnar *kaerumata* still in use even in the 10th century.

cases around the interior walls of the Pao-chia-chiao-tsang-tien of Hua-yen-ssü in Ta-t'ung, datable probably around 1040 (fig. 150).⁴⁰⁴

The second innovation, by which the inner end of the lever arm supports the aisle purlin, is not known in Liao monuments, making its appearance at Ta-t'ung first in the San-shêng-tien of Shan-hua-ssü during the second quarter of the twelfth century.⁴⁰⁵ Judging from available photographs, I should say that it was lacking also at Fo-kuang-ssü. Where cantilevers are used in the Liao style, as in the Kuan-yin-ko (fig. 30) or in the eleventh century wood pagoda of Fo-kung-ssü at Ying-hsien, they merely butt against the undersides of beams, in the T'ang tradition of Tōshōdaiji. Under the Sung, the fully developed lever technique is well attested for the twelfth century, being used, for example, in the Ch'u-tsü-an 初祖庵 of Shao-lin-ssü 少林寺 on Mt. Sung in Honan, dated 1125; and in the Taoist San-ch'ing-tien hall of the Yüan-miao-kuan in Su-chow, rebuilt in 1179 (fig. 119).⁴⁰⁶ It is described in the *Ying Tsao Fa Shih*, which speaks of "the cantilever running upward inside the building to the underside of the aisle purlin."⁴⁰⁷ Elsewhere the text marks another aspect in the change in conception of the member's function since T'ang. As we have seen, the use of the lever arm in the T'ang tradition—at least in existing remains—is always accompanied by an aisle ceiling, as if the member in its awkward adolescence were being deliberately hidden. The same concealment is practised under the Liao. In the Sung style, in China and Japan, the construction is frankly expressed, and is even made a decorative asset. This new point of view also is justified by the *Ying Tsao Fa Shih*, with the phrase, "if the construction as it ascends inside the building be exposed, use the interior lever arm."⁴⁰⁷

The earliest example of the form, with every structural essential of its later mature use, is given by the main hall of Pao-shêng-ssü almost a century earlier than the *Fa Shih*, in 1013: a fact which, so far as the evidence goes, may perhaps be used to emphasize the priority of the south in architectural development (fig. 146).

Among other, minor features of *Karayō* bracketing, one of the most noticeable is its

⁴⁰⁴ Cf. *Bull.* iv/3, 4, figs. 34 ff., pls. 6-8.

⁴⁰⁵ *Ibid.*, figs. 140 ff., pls. 37-41.

⁴⁰⁶ *Ch'u-tsü-an: Bull.* vi/4, pl. 33, fig. 44, pp. 112 ff.; Tokiwa and Sekino, *Buddhist Monuments*, ii, pls. 129-31, pp. 120 ff. Dedicated to the First Patriarch of the Ch'an sect, Bodhidharma, this building is also called Mien-pi-an 面壁庵 because it is supposed to mark the spot where he sat in meditation facing a wall for nine years. Its date is given by an inscription of Hsüan-ho 7th (1125) on one of the four interior pillars. Various stelae record later repairs. *San-ch'ing-tien: Bull.* vi/3, Liu Tun-tsêng, "The Ancient Architecture of Soo-chow," pp. 21 ff. and accompanying figures. The history of this famous temple is well documented both by stelae and published records, given by Liu; later restorations have been extensive, but the framing of the building seems clearly to go back to its re-erection after a fire in 1179.

⁴⁰⁷ *Ying Tsao Fa Shih*, iv, "The Cantilever Rafter 飛昂": 若昂身於屋內上出皆至下平搏... *Ibid.*: 若屋內徹上明造即用挑幹 *T'iao-hsieh* 挑幹 "slanting arm," apparently is a general term for such a member, which if given a certain ornamental treatment becomes a *shang-ang* 上昂. Cf. *Fa Shih*, i, under 飛昂: "There is also the *shang-ang*, which is like an *ang*-shape 'slanting arm,' and which is placed on the interior of the building or beneath a balcony." 又有上昂如昂椳挑幹者施之于屋內或平坐之下. It is quite clear that the cantilever rafter is not necessarily a continuous slanting member from interior to exterior; but may be wholly on the interior, when it is called *shang-ang*, or wholly on the exterior, when it is called *hsia-ang*. See below, p. 235 and note 412.

multiplication of longitudinal supports. In the T'ang style the most elaborate bracketing provides only three longitudinal planes in which support is given, the topmost wall beam, the eaves purlin, and a beam between. The first transverse arm holds only a second, like itself, so that above these two it is possible to have a wide area, covered by a soffit ceiling. In the *Karayō*, every transverse projection holds a longitudinal bracket, in addition to the next transverse step (fig. 54). There are thus, normally, four supported longitudinal planes; and since each step is much shorter than in the previous style, these are closely crowded together, making impossible both the old reticulated soffit and the parallel-stripped cornice. Instead, each narrow interval is covered merely by a small board, set horizontally or aslant according to its position in the system; inside the building, even these are omitted. Each longitudinal plane consists, normally, of a three-headed arm at the bottom, a wider arm above, and a beam at the top. On the interior, all these longitudinals give the effect of a continuous shelf, running around the building.

All bracketing, in comparison to the scale of the building involved, is more complicated than that of the "Japanese" style. The minimal system is used at Tenonji near Nagoya,⁴⁰⁸ traditionally erected in 1362 (fig. 143). Here on both exterior and interior, a single transverse arm holds the longitudinal arm which supports the purlin. Intersecting the longitudinal is a purely ornamental transverse member with a moulded head. Historically, this is the survival of an actual beam end, as used in the Liao and Chin monuments of Ta-t'ung.⁴⁰⁹ Here it merely runs through the bracketing, appearing in the same way on the interior. Such structural decadence is, indeed, characteristic of the whole system. The weights supported on exterior and interior are quite different, the former comprising the whole eaves overhang, the latter only a light wooden ceiling; in spite of this disparity of function, the bracketing is symmetrical inside and out.

The next stage in increase of scale is accompanied by the introduction of the cantilever arm. In Fusaiji, Shuonan, and the Shakadō of Umeda in Kii Province⁴¹⁰ (to name standard examples), the bottom member is a transverse arm (figs. 133, 139). This holds a longitudinal bracket and beam above, and in the transverse sense, the cantilever. The latter supports the outermost longitudinal arm, and this in turn the purlin. On the interior, the cantilever runs back to the aisle purlin, which it holds either directly (in Shuonan) or through a three-headed bracket (in the considerably larger Shakadō). It is braced by a lower slanting arm, which runs down to stop against the wall plane; and which is held, at its lower end by one (Shuonan) or two (Shakadō) steps of transverse arms. In both these examples, the cantilever also supports a subsidiary purlin close to the wall. This last feature, corresponding to no real structural necessity, illustrates the redundancy of a late period when complication is valued for its own sake. It is absent in the relic hall of

⁴⁰⁸ Cf. Amanuma, *Zūroku*, Kamakura vol. ii, pp. 86-93.

⁴⁰⁹ Cf. the discussion of beam-heads in the Ta-t'ung monograph, *Bull.* iv/3, 4, pp. 154-5.

⁴¹⁰ Cf. Amanuma, *Zūroku*, Kamakura vol. ii, pp. 14-21; "The Shakadō of Umeda" (in Japanese), *Tōyō-bijutsu*, ii, June, 1929, pp. 57 ff. The enshrined icon contains inside its body an inscription, partially effaced, with the date Karyaku 2nd (1327). Amanuma points out that the style of the image itself cannot be so late, so that the date probably refers to its re-installation in the newly erected hall. The Shakadō, originally a Zen foundation, later passed into Shingon hands, and now belongs to Tendai.

Engakuji, earliest of *Karayō* remains (fig. 142), and also from the Ch'u-tsū-an of 1125, which in other respects closely parallels the type described above. Further research is necessary to determine whether it exists in China at all, or represents a quasi-decorative elaboration of the Sung system at Japanese hands.

A single-cantilever system of the same basic type is also used in the earliest remaining example of the technique, at Pao-shêng-ssū (fig. 146). This primitive stage is marked by the absence of any longitudinal brackets except those in the wall plane and the single members which supports the eaves and aisle purlins. So strong an emphasis on transverse projection alone, in striking contrast to the Southern Sung standard and to the *Karayō*, recalls not only the *Tenjikuyō*, but even more closely the Asuka cantilever technique of Hōryūji. Any suggested historical connection based on a regional preference would be difficult or impossible to prove, but the idea at least merits discussion.

The final stage of *Karayō* bracketing is that of the relic hall, the fore-hall of the Kaisandō of Eihōji, and large-scale Zen halls of later periods in general (figs. 129, 134, 135, 142). This differs from the second, on the exterior, in the introduction of a second cantilever end, or "beak," making a system of three steps and four tiers. Double "beaks" may be carried back to the late T'ang Fo-kuang-ssū. They are illustrated often in the late Tun-huang frescoes;⁴¹¹ in actual use, in the Kuan-yin-ko of Tu-lo-ssū (fig. 30) or in the main hall of Fêng-kuo-ssū at I-hsien,⁴¹⁷ they are seen to represent a strengthening of the cantilever by duplication of arms, the two running parallel into the interior. Even by the time of the *Ying Tsao Fa Shih*, however, it had become permissible to use in addition either "beaks" which were actually horizontal members, merely imitating the end of a cantilever, or interior cantilevers which did not appear on the outside (fig. 140).⁴¹² Both these devices, characteristic of a style past its peak of functional idealism, appear in the late twelfth century San-ch'ing-tien at Su-chou (fig. 141). In the two most important Japanese examples, the later Kaisandō is actually the more honest and the closer to tenth century practise than the earlier Shariden (figs. 129, 142). Without foreknowledge of the degeneration already well under way in Southern Sung, if the two were undated it would be natural to make the Kaisandō the earlier; a fact which vividly shows the danger of drawing conclusions from insufficient evidence. In the thirteenth century relic hall, of the two beaks which show on the exterior, only the upper continues inward to the aisle purlin as a true lever arm; the lower is a disguised horizontal bracket (fig. 142). Inside the supplementary slanting arm which braces the cantilever runs down to stop against the wall plan. At Kōzanji (fig. 134)⁴¹³ and Eihōji, in the fourteenth, both visible ends belong to true canti-

⁴¹¹ E. g. Pelliot, *Grottes*, pls. xv, xvi, xxiii, xxxviii, etc.

⁴¹² Even the badly re-drawn illustrations to the *Fa Shih* (xxx, xxxi) clearly show this; and the possibility that the *ang* may not be continuous is admitted in the terminology which calls it either interior, *shang* 上, or exterior, *hsia* 下. In normal Japanese practise, derived from T'ang, the cantilever rafter is always continuous, and so has only one name, *odaruki* 尾樑.

⁴¹³ Amanuma, *Shiyō*, p. 268, pl. 83; Hattori, *N-kokenchikushi*, Kamakura vol., pp. 296 ff. An ink inscription on the underside of one of the aisle beams states, "This hall's pillars were set up in Genō 2nd (1320) . . ." which corresponds well enough to its early style to be acceptable. For the Nikkō cross-section referred to, see Masuyama, *N-shaji-shiryō*, p. 166 (principal shrine building of the Daiyūin 大猷院, or mausoleum of Tokugawa Iemitsu).

levers and this historically earlier technique continues even into the seventeenth century architecture of Nikkō (where its honesty is somewhat incongruous). The difference, certainly not one of period, may be the result of varying sources of carpentry tradition in China.

In the exposed cantilever construction in its early stage, the same system is used for both the columnar and intercolumnar axes, the only difference being that in the former an aisle beam runs into its lower transverse bracketing, and may intersect the under lever-arm. In versions from Muromachi and later, like Shuonan, this rigorous consistency may be abandoned, the aisle purlin being supported on columnar axes not only by the lever-arm but by a post from the aisle beam as well. Since the same doubling of support occurs even in the early eleventh century Pao-shêng-ssū (fig. 146), it probably represents a potentiality of the original *Karayō*, rather than a later Japanese modification.

In all halls of the medium-sized classes described above, in which the cantilever is visible, the central flat ceiling has also its own surrounding entablature of posts, beams, and bracketing (figs. 136, 137). The latter is usually a one-step, two-tier system like that of the Tenonji main eaves, with ornamental pseudo-beam-heads.

In double-eaved buildings like the relic hall, there is a marked distinction in bracket type between the elaborate system which supports the main overhang, and that which holds only the pent-house roof over the aisles. The latter is very simple; the standardized practise seen at Engakuji calls for a single step only over the column-top, supporting the projecting end of a true aisle beam, and on the intercolumnar axis a three-headed bracket in the wall plane (fig. 149). In the highly peculiar Kannondō of Eihōji,⁴¹⁴ apparently contemporaneous with the Kaisandō, both of these standards are remarkably reduced, there being no intercolumnar brackets of any sort. In addition, the rafters, if any exist in the eaves, are concealed by a sloping board ceiling (fig. 145). Such anomalies, like the compound ground-plan of the Kaisandō, are commonly attributed to Japanese alterations of the repertory imported a century earlier. Once again the explanation is possible. In the coast provinces of south China, however, a characteristic of many buildings of late Ming or Ch'ing date—entirely at variance with the official style derived from Sung—is the same sort of minimal bracketing, confined to the column-tops or even omitted entirely over wide spans.⁴¹⁵ These are less than satisfactory evidence of the state of south Chinese architecture four centuries earlier, but their persistence in the face of the official style may indicate an obstinate provincial tradition; and thus it seems to me by no means unlikely that both architectural curiosities at Eihōji were derived from the same source.

The four-tier bracketing maximum of the *Karayō*, far more complicated in appearance

⁴¹⁴ Amanuma, *Shiyō*, pp. 271 ff.; *Zūroku*, Kamakura vol. ii, pp. 52-61.

⁴¹⁵ The inadequacy of the ordinary photograph of Chinese architecture, in which everything under the eaves is hidden in impenetrable shadow, makes it difficult to amass evidence on this point except by personal experience. Examples which seem to fit the case are, e.g., the abbot's quarters 方丈 of Wan-nien-ssū 萬年寺 and Kao-ming-ssū 高明寺 on T'ien-t'ai-shan; the Dharma hall of T'ien-t'ung-ssū 天童寺 on Tai-pai-shan 太白山; the main hall of the Nan-chên-miao 南鎮廟 in Shao-hsing-hsien 紹興 (all of the above in Ch'iang); the *sūtra* repository of Chin-shan-ssū 金山寺 in Kiangsu (cf. *Shina-kenchiku*, i, in the series *Seikai-kenchiku-shūsei*, pls. 101, 98, 87, 19, 85 respectively; all but the Nan-chên-miao are given in *Buddhist Monuments*, vols. iv and v, with the same photographs).

and construction than any earlier Japanese bracketing, is still considerably simpler than the Chinese limit. The *Ying Tsao Fa Shih* (xxx) illustrates a complex applicable to large-scale halls which consists of five steps and six tiers; two transverse arms, three beaks, plus the final longitudinal. In the seventeenth century Buddha hall of Kenchōji in Kamakura, a four-step, five-tier system is used in the upper eaves; this instance, so far as I know unique, is possibly due to an influence from the Ming style. The latter otherwise seems to have had almost no effect on later Zen practise, which preserved at least its architectonic elements frozen in the Sung mould. It is worth noting that the latter, like the T'ang style, was subject to sumptuary decree, persons or public offices of lower rank under the Sung rulers being forbidden to use complicated forms of bracketing, as well as ceilings with cupolas and other forms of pretentious elaboration.⁴¹⁶

The fact should be remembered that later re-roofing of every Zen hall of early date has deprived its Sung structural system of at least half its meaning (as we have seen to be the case also with the T'ang-Nara style). The eaves purlin still supports part of the weight of the overhang; but much of this is taken by the long lever timbers, *hanegi*, hidden inside the double shell, and these have removed all structural justification from the eaves purlin and the support so ingeniously contrived for it by the Chinese. The cross-section of the relic hall shows how the latter now holds only the weight of the rafters (fig. 142). In Shūōnan a Japanese framing system must have been used from the start. Not only does the aisle purlin hold only rafters, instead of a whole section of roof; the rafters above it could never have been used structurally, in the Chinese manner, for they continue down only to the wall, the rafters of the overhang emerging at a lower level (fig. 133) with a complete break from the old exterior-interior unity.

Certain details characteristics of *Karayō* bracketing should be noticed. The size of its members in relation to that of the whole buildings is perceptibly less than in T'ang, and often is small-scale to the point of effeminacy; a sign of lessening functional importance, which, with increasing complexity, marks the Indian summer of the Sung style. The projection of arms is timid, in place of the old boldness. The bearing-block or capital is often a decided oblong, and the socket in its "abacus" is so deep that the solid portion remaining below gives an impression of weakness. The "beak" end of the cantilever no longer runs down on a generally straight line, to be cut off almost vertically, as in T'ang; the whole "beak," now very slender, curves upward as it goes out and is sliced off at a sharp angle; bevelling of faces may bring the tip out to a sharp point. The lower side of the arm is not set directly into the socket of the block which supports it, but resets on a small, intermediate wedge. The upper edge of the bracket arm is bevelled to recall its original curve; while its outer end is cut on a circular arc (a degeneration from the old complex curve like

⁴¹⁶ *Sung Shih*, cliv, *Yü Fu Chih* vi: "In general the houses of the common people may not be provided with multi-tiered bracketing, coffered ceilings, or varicolored painted ornaments by way of embellishment, nor are they to be permitted widely overhanging eaves on four step brackets . . ." 凡民庶家不得施重拱藻井及五色文采爲飾仍不得四鋪飛簷. (I have guessed at the meaning of the last four characters from the fact that 鋪作 is used for "bracketing" throughout the *Fa Shih*).

The fact that all these forms of architectural ostentation had become more or less commonplace by this period is suggested by the categories to which they were forbidden: in Sung the common people 民庶, in T'ang those below the rank of prince or duke 王公以下 (see above, p. 108 and note 175).

that which took place in the Doric capital under Roman use). At the corners of the building, the special *onito* bearing-block is used, with the pulled-down corner points characteristic of post-T'ang design.

In the full cantilever system, the outermost longitudinal arm which holds the purlin may be intersected by a pseudo-beam head (Engakuji, Kōzanji, Fusaiji, Eihōji Kaisandō, etc.) or may not (Shuonan, Shakadō). The decorative development of this feature in China may be traced from the tenth century in the Kuan-yin-ko, where it is simply a rectangular timber cut off vertically (fig. 30). In the eleventh century Pao-chia-chiao-tsang-tien of Hua-yen-ssū, it is sliced off on a descending slant. A hardly more advanced stage is shown in the twelfth century Ch'u-tsū-an, the slant now running in the reverse direction, with the outer face bevelled. The Sung style must have contained more decorative possibilities, for among the Chin monuments of Ta-t'ung which reflect its influence there are two considerably more elaborate beam heads. In the San-shêng-tien of Shan-hua-ssū, the silhouette imitates an animal's head; in the Ta-hsiung-pao-tien of Hua-yen-ssū it is a sort of upturned hook, with an irregularly curving top edge.⁴¹⁰ The *Karayō* form of Japan is closest to this last in character, although dissimilar in shape. In the broadly representative version of the fore-hall of the Kaisandō, the timber end flares upward in a long triple curve as it emerges from the bracketing, and then descends from a sort of nose, in a combination of Ionic and Lesbian cymas (fig. 135). Cut faces are bevelled to a central edge, and on each side the Ionic cyma is continued to form an incised volute. Inside the porch of the Eihōji Kannondō, the beam-head takes on a greater luxuriance, forming a double cloud scroll carved in the round, with an up-flaring tail (fig. 145): a type much imitated elsewhere in Japan, even in Shintō shrines, which has its distant Chinese cousin in the interior bracketing of the Ch'ing dynastic ancestral shrine, T'ai-miao, in Peking.⁴¹¹

While the exterior bracketing of the *Karayō* is purely architectonic except for such details as these, the interior is treated with greater richness. In halls like the Kaisandō and Shuonan, the undersides of both the main and secondary lever arms have an attached cresting of cloud scrolls carved in relief. In the former hall, the second transverse bracket arm is cut off at a slant which echoes that of the lever arm above. In Muromachi this tendency is further accentuated by the use of arms with floral or cloud-scroll ends; paralleling to a lesser extent the ornamentalizing of brackets which is seen in early Ming in the buildings of Chih-hua-ssū in Peking.⁴¹² All such decorative additions and modifications must mark a late phase of the Southern Sung style, since they are not present in Chinese prototypes of the twelfth century like the Ch'u-tsū-an, or the San-ch'ing-tien in Su-chou.

One further member, used both inside and out, which now receives ornamentation is the cushion timber, *sane-hijiki*, intermediate between the topmost longitudinal bracket and the ceiling frame or purlin which the latter holds (fig. 135). In the T'ang style, this had

⁴¹⁰ For later Chinese forms of the ornamental "beam-head" as a part of bracketing, see the reference portfolio on bracketing published by the Society for Research in Chinese Architecture, Peking: *Chien Chu Shé Ch'i Ts'an K'ao T'u Shu* 建築設計參考圖集, v.

⁴¹¹ *Ibid.*, pls. 11, 12, or *Bull.* iii/3; but more interesting ornamental variations exist than these photographs indicate.

taken the unobtrusive shape of a "boat" bracket with rounded ends; now each end is moulded and bevelled.

An amplification of the idea is sometimes used between the main transverse girder and its brackets. A comparatively simple interior design like that of the relic hall uses no bearing-timber at this point. In the Shakadō the aisle beams possess an intermediate member with a moulded end, like that used in the eaves bracketing; while under the main girders, the feature is elaborated into a long corbel whose sides are carved in a cloud-scroll rinceau (fig. 144). In Muromachi, in line with the sculptural development characteristic of the period, the same corbel at Shuonan is so deeply carved and undercut that whatever appearance of function it originally had is lost.⁴¹⁹

The *Karayō* eaves purlin has a tall oblong cross-section with rounded edges, in contrast to the circle of T'ang tradition. Its upper surface is cut out in a very long and almost imperceptible curve, as a basis for the beautiful soaring eaves characteristic of the style. Comparatively small scale makes it possible to accommodate this corner rise in the height of a single timber. In the large Liao and Chin halls of Ta-t'ung, and generally in the later Peking style, a comparable effect is gained—at first with almost equal subtlety, in Ming and Ch'ing with an abrupt break between horizontal and curve—by the introduction of long triangular pieces between the horizontal purlin and the rafters.

The rafters, again in two tiers, are in single-storeyed buildings set not on transverse axes but on radii from the center, so that they fan gradually out to the corners. In buildings with double eaves, fanning is normally practised in the main roof only. Such complete radiation is so far as I know without any remaining Chinese example. One Zen hall, that of Kōzanji, uses instead the system characteristic of existing Chinese buildings and of the *Tenjikyō*, in which the fanning is confined to the corner eaves bay.

The *Karayō* column is a cylinder, abruptly rounded off at top and usually at bottom. Matching the rise of the purlin toward the corners, the columns also increase in height as they go outward from the center.

BEAMS IN THE WALL PLANE:

The beams at the column-top, like the column itself, rise toward the corners.

In the *Karayō*, as in the *Tenjikyō*, the characteristic Japanese column-enclosing beam is absent. The original column-piercing beam has now been amplified to meet the change in bracketing arrangement. It had existed in T'ang as a means of lateral bracing. When intercolumnar brackets were first used, as in Pao-shêng-ssū, they rested upon it, creating a new problem of vertical thrust. One solution was to increase its size; the other, more economical, was to place between the bracketing and the vertically-set piercing beam, another beam laid horizontally, the two together giving a T-shaped cross-section. The combination can be traced back to the eleventh century in the Liao monuments of Ta-t'ung and elsewhere, and its two elements are illustrated in the *Ying Tsao Fa Shih*. Throughout the subsequent course of Zen architecture, it retains its original character almost unchanged, the section remaining a definite "T" and each member being a narrow oblong. This is

⁴¹⁹ Amanuma, *Zūroku*, Muromachi vol., pp. 64-5. The Japanese name for this member is *mochiokuri* 持送.

another sign of the freedom of the style from Ming or Ch'ing interference; since in later Chinese practise the column-piercing beam widens until it is flush with the other or even projects beyond it.⁴²⁰

Both beams run beyond the corner columns for an appreciable distance, as *kibana*, and terminate in a series of decorative mouldings (fig. 135). Here also—as in the case of the pseudo-beam-head projecting from the bracketing—the idea can be traced back into the Liao; and at the outset, in the Pao-chia-chiao-tsang-tien of Lower Hua-yen-ssū, is without any decorative embellishment, the members being cut off straight. In the twelfth century San-shêng-tien of Shan-hua-ssū, the end of the lower beam is (rather clumsily) moulded.⁴²⁰ The *Karayō* standard is well advanced beyond this stage, the mouldings being beautifully crisp, and elaborated by a bevelling of faces.

Precisely the same T-shaped combination of beams with decorative corner projections is used between the dwarf posts which frame the flat ceiling inside.

A second column-piercing beam typically runs at some distance below the main one. Frequently the interval is filled with a vertical latticing, the bars being not straight but waving in a triple curve; above the center doorway on front and rear is a small solid wood emblem, usually the Buddhist flaming pearl (fig. 149). The same treatment is illustrated in Gikai's scrolls (fig. 123). Other beams, at a second and third level, cross the lower part of the building, as a means of bracing and to serve as sills for the windows, etc.

COLUMN BASES AND PLATFORMS:

The Zen hall stands on a stone terrace, which (at least in later buildings) may be faced with a panelling similar to that of the Nara style. The floor inside is almost always paved with square tiles of standard size, laid in a diamond pattern.

Column bases have a characteristic outline unlike that of any other style. In the Greco-Roman base and in derivations from it in the East, every tier has upper and lower halves which are either symmetrical or balanced. Here the base, *soban* 礎盤, is quite asymmetrical, being formed of two opposing curves, each going in a single direction only. The material, usually stone, may be sometimes wood, as in the Umeda Shakadō. The type persists throughout Zen practise, and appears in other currents of religious architecture through the contagion of Zen example. It has only one rarely seen rival, the drum-shaped base of Ming in south China; which was imported in the seventeenth century with the last Zen sect, Ōbakukan, and is almost entirely confined to the latter's headquarters, Mampukuji,⁴²¹ and to the port of entry, Nagasaki (fig. 117).

⁴²⁰ This development is discussed in the Ta-t'ung monograph, *Bull.* iv/3, 4, pp. 155 ff. and fig. 187. The authors appropriately emphasize the progressive loss of understanding of structural efficiency which the change illustrates; the Ch'ing beams with their square cross-section being no stronger, and much more extravagant of material, than the Sung oblongs.

⁴²¹ Ōbakukan examples are illustrated by Amanuma, *Zūroku*, Momoyama and Edo vol., pp. 209-11. These may be compared with Chinese versions in the reference portfolio *Chien Chu Shê* etc. published by the Soc. for Research, etc., Peking, vol. 7, on column bases 柱礎, esp. pls. 21 ff.; which as usual are more elaborate, since the Chinese are expert stone-carvers as the Japanese are not.

DOORS AND WINDOWS:

Karayō doors are a more elaborate development of the panelled type seen in the *Tenjikyō*, being subdivided into a number of different panel shapes (fig. 149). The largest, near the top, may have imitation or actual latticing, with delicately moulded dividing bars. Pivots in the outside rail fit into top and bottom socket-blocks, *waraza*, which again are like those of the "Indian" style, but with richer mouldings and an elongation in plan. In the largest halls, of Edo date but probably reproducing original features, each side of the double door is itself halved and hinged down the middle, making four surfaces in all (fig. 127).

At Engakuji the central doors are of this elaborately panelled type with socket-blocks, set on the exterior. In the bay on each side, the door swings inward; and although itself rectangular, closes against a doorway shaped at the top like a cusped late Gothic arch. This type of frame, corresponding closely in outline to the upper part of a *kozama* dado panel, goes back in Chinese wooden architecture at least to the source from which the door-frames of the eleventh century Liao *sūtra* cases of the Pao-chia-chiao-tsang-tien were imitated (fig. 150). Probably it may be traced eventually to the stone arch form borrowed with early Buddhism from India. Gikai's drawings show it in Southern Sung use above doors and windows, and as the repeating motif of a pseudo-arcaded wooden porch (fig. 123). The last is preserved in no *Karayō* remains in Japan, if it was ever imitated there. The cusped-arch window frame, *katōmado* 花頭窓 or *kōtōmado* 火頭窓, is typical of Zen architecture, in combination with a sturdy lattice-work of verticals crossed at top, middle, and bottom by grouped horizontal bars. In its earliest stage at Engakuji, the sides of such a window are vertical, and the curved outline above has a fine vigor (fig. 149). In later development—visible at a transitional stage in Shuonan, and in full force in the seventeenth century—the top loses much of its strength and beauty and the sides flare more and more outward, producing a much less satisfactory form which at worst is extremely ugly (fig. 128).

A rarer window type, set in either a rectangular or arched-headed frame, is filled with a very delicate grille-work, combining circles and diamonds in a diaper pattern. No existing example of this *hanasama-mado* 花狭間窓, is original, its fragility entailing a short life. Those of the Kaisandō of Eihōji are modern restorations, said to reproduce faithfully the design of their predecessors, from fragments still remaining (fig. 151). The fashion is of course a Chinese one; and its Japanese version may be compared to such existing early Ming grille-work as that of Chih-hua-ssū in Peking, which is almost identical with that of the Kaisandō.⁴²²

ROOFS AND THEIR ORNAMENTS:

As already mentioned, every existing Zen building of the thirteenth and fourteenth centuries seems to have been re-roofed; rarely in tile, usually in cypress shingles, sometimes in thatch or even in metal. Their original state, so strongly Chinese in every other respect,

⁴²² Chinese examples, including those of Chih-hua-ssū, are given in the reference portfolio of the same series, vol. 8 on exterior ornamentation 外層裝修.

must have included tile roofs. By a chronological paradox, the great Zen monasteries in Kyōto have retained tile as the invariable roofing material for their major buildings, even though these date only from the Edo period.

In the earlier monuments, the change has perhaps extended more than once to the whole form of the roof. Disparity is clearly apparent in the existing state of the Engakuji relic hall, where the clumsy thatch is shockingly out of scale with the delicacy of the details below (fig. 134). It is questionable, in addition, whether the hip-and-gable form which the Shariden shares with almost every other early Zen structure in its existing state, was the original. The hip-and-gable has become almost the only possible form in later Japanese architecture. In Sung China it was only one of several designs, each with a fairly distinct function. It seems to me probable that a Sung architect, with habitual Chinese directness, would have crowned a small, square building like the relic hall—or any of its *Karayō* cousins—with an equally square roof; i. e. with a pyramid, rising to some sort of symbolic finial. One Japanese hall, the Shakadō of Umeda, preserves what may be a memory of such a form; its tiled roof is actually hipped, but the ridge is extremely short, and the general effect is nearly pyramidal. A summary view of the Chinese prototype—a two-storeyed, square chapel, with a four-sided roof and crowning finial—appears in Sesshū's careful painting of the Ch'an headquarters Chin-shan-ssū, the "gold mountain temple" on the Yang-tzū, which he must have visited during his travels in China around the middle of the fifteenth century.⁴²²

Restoration has in the same way done away with any tile roof ornaments which might have otherwise survived six or seven centuries of weathering. What the original *Karayō* ridge acroterion must have been like is shown both by Gikai's scrolls, and by numerous Buddhist paintings of Kamakura executed under Chinese inspiration: instead of the old, three-quarters abstract *shibi* "tail" of T'ang, a quasi-realistic fish whose wide-open mouth seems to swallow the ridge (fig. 123). This dolphin type has been preserved in considerably later Japanese architecture; e. g. the famous golden pair of Nagoya Castle, and many tile gate acroteria around Nara. Its realism marks it as a product of south China, entirely different from the conventionalized dragon forms of Liao, Chin, Ming, and Ch'ing in the North. A Japanese picture scroll of the end of the thirteenth century, the *Ippen-shōnin-eden*, shows it in use on the roof of a non-Zen temple in Hyōgo near the present port of Kōbe, then an important center of trade with China.⁴²³

BEAMS AND INTER-BEAM SUPPORTS: THE GABLE FIELD:

The *Karayō* interior beam shows decorative features typical of Sung practise which distinguish it from either of its rivals in Japan. The under edge is paralleled by an "eyebrow," *mayu* 眉, consisting at first merely of a very narrow sinkage. The under

⁴²² Gikai scrolls: *Bull.* iii/3, figs. 8, 9; *Ippen*, scroll xi, view of a Kannondō in Hyōgo (the habitual realism of this picture scroll in contemporary details makes it excellent evidence). The evolution of the acroterion from an abstract tail form to a monster swallowing the ridge—a change apparently of late T'ang or early Sung—is discussed in the Ta-t'ung monograph, *Bull.* iv/3, 4, pp. 46-7. The Sung sumptuary legislation quoted in note 416 above, also distinguishes between "owls' tails" 鴞尾 (the earlier name, in Japanese *shibi*) which were permitted on the gateways of important cities 諸州正牙門及城門, and "scarecrows" 拒鴞 which were forbidden, presumably as being more elaborate and ostentatious.

surface contains a narrow sunk panel with half quatrefoil ends, the so-called *shakujōbori* 錫杖彫, somewhat like that of the *Tenjikyō*. The beam is horizontal across most of its span, curving down to the pillar at either end; as a reciprocal curve, the whole of its underside is slightly hollowed out until a few inches from its impost. Where this hollowing ends, a diagonal line of sinkage, the *sodegiri* 袖切, runs back and up at a slant to the top surface, along each face of the beam; the surface outside of it being a fraction of an inch lower than that inside (figs. 137, 138). A constantly increasing emphasis on these three features marks the use of the *Karayō* beam in later architecture. The cross-section is a tall oblong. The whole timber, with its vestigial curves at either shoulder and beneath, represents a merely formal survival of the old arch.⁴²⁴ Both the eleventh century Pao-shêng-ssū at Su-chou and Gikai's drawings show beams with a marked over-all curve, as the immediate prototypes of the *Karayō* convention.

In the Sung style and in *Karayō* a special form of beam is used to join different levels. An early Chinese version, in the revolving *sūtra* repository, Ch'uan-lun-tsang-tien, of Lung-hsing-ssū in Cheng-ting-hsien, shows this as a long timber making a gradual S-curve, the same general depth throughout (fig. 148). The *Karayō* standard marks a difference in form which is suggested by its Japanese name *ebi-kōryō* 蝦虹梁, or "shrimp-shaped rainbow beam," the inner end swelling to a sort of bulbous head much deeper than the outer. At large scale it is placed across the aisle of a double-roofed hall (fig. 147), at very much smaller scale, it is frequently used high up, to connect the aisle purlin and the bracketing which supports it with the frame around the flat ceiling (fig. 139). In both services, its original function of rising to a higher level may be forgotten. As early as the relic hall, both aisle and ceiling *ebi-kōryō* run horizontally, only the conventional swelling of their contours remaining to recall their predecessors at Lung-hsing-ssū. This again is an indication that the style imported to Japan in the thirteenth century was already in a late, autumnal stage of development. The versions of Muromachi, Momoyama, and Edo mark a further transformation, the form in the end becoming disagreeably sinuous, with all the surface elaboration given then to the conventional "rainbow beam."⁴²⁵

A short *kōryō* is sometimes used across the corner, between column-head brackets, to provide extra bracing and additional support for the corner cantilever. A number of Sung and later remains show this technique in Chinese use (fig. 138).⁴²⁶

The *Karayō* inter-beam support used to connect the main transverse girders with the frame of the ceiling, is like a truncated column, peculiar only in the fact that its lower end is continued down over the face of the girder in a long, ornamental termination like the bill of some aquatic bird (fig. 137). This feature, in the decorative development

⁴²⁴ A 12th century parallel in north China (imitated by the Chin from the Sung) is furnished by the gateway 山門 of Shan-hua-ssū in Ta-t'ung (cf. *Bull.* iii/3, 4, pp. 130-1, fig. 170). This has both "eyebrow" and diagonal sinkage, simply executed; the whole beam is perfectly straight, curvature being merely suggested by carving on its surface. Instructions for fashioning the true "moon beam" 月梁 (the later Chinese name for the Japanese "rainbow beam") are given in the *Fa Shih*, v.

⁴²⁵ See below, p. 295.

⁴²⁶ Cf. the two reference portfolios, *Chien Chu Shē* etc. on bracketing 斗拱 published by the Soc. for Research, etc.; vol. iv, pl. 19, vol. v, pls. 8, 11, 12, etc. The practise is absent from Liao and Chin monuments in north China, which suggests that it was developed principally under the Southern Sung.

given it in later centuries, receives the descriptive name of *yuiwata* 結綿, or "hair ornament." The post itself, because its outlines, beginning at the rounded-off top and ending in the narrow "bill," are more or less curved, is called *taiheizuka* 大瓶束, or "big bottle post."

In the gable field the same form is used as an exposed king-post, supporting the ridge-pole by bracketing, and standing on a "rainbow beam" which in turn is bracketed at its ends. The gable is further ornamented by "hanging fish," *gegyo*, of which early examples have fortunately been preserved in the Kaisandō (fig. 131). *Gegyo* of the same shape are used at the apex of the gable and to cover the projecting end of the first purlin down on each side. Each consists of a two-tiered palmette of great crispness and beauty of outline, the volutes as yet merely beginning to turn in. The pendant is framed on each side, along the barge-boards, by "fins," *hire* 鱗, which here take the form of freely winding leaf forms, carved in very shallow planes with the same fresh precision. A more conventional type, seen for example at Fusaiji, consists of three palmettes, one at the bottom facing down and the two above facing away from each other. This is an almost exact reproduction of one of the illustrations in the *Ying Tsao Fa Shih*.

The large-scale halls of early Edo, showing late decorative modifications in their *gegyo* and *hire*, have also larger gable fields which necessitate a more elaborate means of framework. This usually takes the form of a two-beam system, with posts and brackets between, mounting to the king-post. This is an entirely Chinese combination in basic forms (although its actual use, as pure decoration without any relation to the structure of the roof, is entirely non-Chinese) and so may well have been used in lost early halls of the same scale.

CEILINGS:

Ceilings, being flat and without any sort of panelling, are known as *kagami-tenjō* 鏡天井, "mirror ceilings." In the large halls of major monasteries, they stretch across the entire main block, and are usually painted in ink with a great dragon among clouds, inside a central circle (fig. 127). In smaller halls, as already noted, the flat ceiling occupies only one square bay, surrounded by its own bracketing and beam system and enclosed by the exposed bracketing of the interior purlins. This reversal of normal scale relationships merits attention, and is not without unfortunate effect. The major halls, with their unrelieved flat coverings, have a tendency to barrenness; while the smaller, with their elaborate construction at different levels, give a slightly disagreeable suggestion of over crowding.

In the early sixteenth century Fudōin, mentioned earlier for its remarkable plan, there are two such "mirror ceilings," one over the altar and the other in front. This was made possible, or unavoidable, by its six bays of depth; the cross-section being always basically symmetrical, only an odd number of bays can lead up to one central ceiling area.

Aisles are always left with exposed rafters.

ALTAR PLATFORMS AND RAILINGS:

The type of *Karayō* altar platform is illustrated in all of its essentials in Gikai's scrolls. It represents one version of a base treatment which is several times shown in the *Ying Tsao*

Fa Shih xxxii: the so-called "Sumeru base," so named because its section, projecting at top and bottom and pulled in at the sides, recalls the traditional shape of Mt. Sumeru in Buddhist cosmogony. Its upper and lower halves are usually symmetrical about a plane through the middle of the dado, each being composed of a series of large and small mouldings which vaguely suggest an Indian version of the Greco-Roman plinth (fig. 153). The bottom rests on imitation feet, which in some prototype must have been an actual means of support. In the earliest remaining *Karayō Shumidan*, that of Engakuji, the top and bottom mouldings are not exactly symmetrical, although the variation is slight (fig. 154). The probably earlier, and certainly more interesting stage is represented by the altar of the Kuan-yin-ko of Tu-lo-ssū, which may be of the tenth century, like the building itself, and which is quite different in its two halves (fig. 30). The Engakuji dado is decorated with a cut-out, applied frieze of lions and peonies in rinceau form, almost two-dimensional. A similar design in stone, stemming from the same sort of Sung prototype, occurs in the fifteenth century Chih-hua-ssū in Peking.⁴²⁷ In later Japanese development, the idea is retained but made more fully sculptural, the dados of Edo altar platforms containing lions and flowers almost in the round (fig. 127).

The typical *Karayō* altar railing may run straight across the front, or be interrupted at the center. There are still three rails, subdivided by posts. In the latter case—that of the relic hall—the top rail curves down to meet the sill beyond the last post, the middle rail being omitted; and then turns up again in the beginning of a spiral. The subdividing posts terminate at the rail in wide, lotus-leaf capitals, turning down as if in a volute at each end. The newel post at each corner has a characteristic lotus top, its lower half like the drooping petals of a withering blossom, and a conventionalized pistil finial rising above (fig. 153). In elaborate railings like those of the relic hall and Tenonji, the interval between middle rail and sill is panelled, each panel being enriched by an elaborate cut-out form. The latter platform is unique in treatment; the dado has a long, sunk panel of the same shape, the intermediate post capital is a blossom with textile pattern affinities suggesting the "Sassanian rose," and the newel finial is something like a pineapple.⁴²⁸ Precedent for at least one of these curiosities is available among Chinese altars; for that of the Kuan-yin-ko has a dado with almost exactly the same complex panel form.

In the largest Zen halls, dating from Edo, the altar platform contains the same elements and the same sort of cross-section; here being very high, it is reached by steep, narrow staircases at the front and each end (fig. 127). A platform of the same type appears in the late thirteenth century "Five Hundred *Rakan*" series of Daitokuji, painted by south Chinese artists; and derivations from the form are used for the Imperial thrones in the Forbidden City in Peking. In Zen use, the whole of the platform is set out with ritual furniture; the icons are placed at an even higher level at the rear, in an enclosed shrine which projects part way across the rear aisle.

⁴²⁷ Barely suggested in the photograph given in *Bull.* iii/3, fig. 12; the base of the *sūtra* case in the *sūtra* repository 轉輪藏.

⁴²⁸ Cf. Amanuma, *Zūroku*, Kamakura vol. ii, pp. 92-3 (Tenonji), 100-3 (Shariden), 12-3 (Fusaiji), 32-4 (Ankokuji); Muromachi vol., pp. 194-7 (Fudōin).

DECORATION:

A feature of Zen buildings which their origin makes curious is their frequently complete lack of painted decoration, interiors and exteriors alike being left in natural wood. Such austerity is certainly non-Chinese, and must mark a deliberate choice on the part of early Japanese Zen masters; not so much as a matter of national habit—for most large temple buildings of the Kamakura period were at least painted in the traditional red, white, and yellow—but in compliance with the spirit of simplicity inherent in Zen teachings. As must be evident by this point, lack of color is almost the only simple thing in Zen architecture, however. In small-scale buildings of great elaboration, its absence, rather than being a relief, creates a curious lack of harmony. At least as an interior style, the *Karayō* seems to me most impressive not at Engakuji nor in any other early building, but in the mausolea of the Tokugawa Shōguns, built in the Zen manner during the seventeenth century, and so marvellously bedizened with gold, lacquer, and painting that the intricacy of the architecture passes unnoticed in a general bewildering richness.

One notable exception to the general use of unpainted wood is the "triple" gate. The interiors of the upper storeys of such monumental gateways as those of Tōfukuji, Daitokuji, and Nanzenji in Kyōto have all their wood members highly colored with formal ornament.

THE "JAPANESE STYLE," *WAYŌ*

PLAN AND CROSS-SECTION:

In the Kamakura period, formal temple buildings of traditional style fall into two categories. One, linked to a revival of the ancient Nara temples, shows that purpose by a conservatism which in any country but Japan would be archaistic. The other, by far the more important, represents a continuation and full achievement of the tendencies marked in the esoteric sects during the Heian era.

The first important move of the new Kamakura government in the field of religion was one of restoration after decades of civil war and widespread destruction. The greater part of its attention seems to have been concentrated on Nara, in part because a settled policy of the Shōgunate was to diminish the resources of Kyōto rather than increase them, and in part doubtless as a reaction against its predecessors, the Taira. The ancient and still enormous and powerful temples of Tōdaiji and Kōfukuji had been burned to the ground by Taira no Shigehira in 1180, for the help that their armed monks had given to the Minamoto. Natural gratitude, if no other motive, would have demanded that they be rebuilt after the latter's accession to power; and thus the chief patron in this first stage of the revival was actually Minamoto no Yoritomo, whose name often appears in dedication inscriptions of the time, and is praised beyond all others by the chronicler of the Tōdaiji rebuilding.³⁰⁰ The revival of interest thus aroused in Nara Buddhism was spread beyond Tōdaiji and Kōfukuji, as the old sects were stimulated to new activity; and almost every temple of the Nara neighborhood shows today the concrete results of this new (and brief) period of prosperity, in buildings remaining from the Kamakura period.

Almost without exception, these buildings were re-erections, on the old platforms and

pillar bases, of halls originally of the Nara period. As landmarks in architectural history, therefore, they may be interesting as showing the Kamakura versions of various details of structure and decoration which in the originals had been executed under strong Chinese influence. In plan this majority offers nothing new beyond the Nara formula of chancel and ambulatory. In section it uses the double roof with invisible framing, which we have seen developing in Heian.

Halls of this type, varying from their predecessors of the eighth century only in roof construction and details of appearance, are; the "golden" hall and lecture hall of Taimadera; the Toindō or "Eastern Precinct hall," of Yakushiji; the Kaminomidō or "upper august hall," of Hōryūji; the main hall of Futaiji on the northwest edge of present Nara; that of Kikōji, southwest of the present station of Saidaiji; and that of Akishinodera, northeast of the same.⁴²⁹ The actual look of these buildings varies greatly. Those at Taimadera are merely heavy-handed continuators of the traditional style, with the changes of proportioning characteristic of their time. The Toindō, inside, is entirely unlike a hall of the Nara period in feeling, and represents rather the light and elegant late Heian style of

⁴²⁹ *Taimadera*: cf. Hattori, *N-kokenchikushi*, Kamakura vol., pp. 138 ff. Tradition states that the monastery was destroyed, except for its two pagodas, in a fire of the Jishō era (1177-80). As to the Kondō, an inscription on one of the chancel columns, dated 1268, shows that it had been rebuilt by that time. In addition an inscription on the ridgepole states that this member was replaced 修理棟上 in repairs in 1326; Hattori believes that there are many signs of modifications elsewhere in the building which date from this period of restoration. In the case of the Kōdō, a ridgepole inscription states that the member was raised in 1303; whether in a first re-building, or by way of repairs, is not stated. The Mandaradō (q.v., p. 257 and note 444 below) which from the Kamakura period at least was the principal building in the group, was probably re-erected around 1240, since its altar platform bears a dedicatory inscription of 1242. Presumably the Kondō, and perhaps the Kōdō, were products of this same period of activity.

Yakushiji Toindō: cf. Hattori, *op. cit.*, pp. 131 ff.; Amanuma, *Zūroku*, Kamakura vol. i, pp. 198-201. The Eastern Precinct had possessed a main hall with a primitive *raidō* in front from the beginning of the 8th century (see above, p. 78 and note 129). The present building bears on its ridgepole a statement that it was set up 建立之 in 1285. Its position varies from the original site, largely through repairs executed in 1733, when it was turned around to face west instead of south (fig. 13; just outside the eastern pagoda).

Hōryūji Kaminomidō: cf. Hattori, *op. cit.*, pp. 136-8. If any predecessor existed, it was destroyed in the typhoon of 989. Erection of the present building, between 1318 and 1324, is recorded in the *Hōryūji-bettōki* 別當記.

Futaiji Hondō: cf. Hattori, *op. cit.*, pp. 159 ff.; traditionally the site of the Emperor Heijō's palace, after his abdication and retirement to Nara; inherited by his son, the Imperial Prince Abo-shinnō (still worshipped as founder in the main hall), and by his grandson, the poet Ariwara no Narihira 在原業平 (825-80), who is said to have made the buildings over for monastic use in 846. Subsequent history is not clear, and data for the re-erection of the main hall is lacking; Hattori on stylistic grounds places it in the 14th century (see below, p. 248).

Kikōji Hondō: cf. Hattori, *op. cit.*, pp. 166 ff. The usual traditions carry its founding back to the Nara period; the name, originally Kangikōji 歡喜光寺, is said to have been given because on the occasion of a visit by the Emperor Shōmu a miraculous ray of light streamed forth from between the eyebrows of the main icon. Later history is extremely obscure, and the temple has long lain in almost complete desolation in the midst of rice fields. The main hall is supposed to be a re-erection of the Ōei period (1394-1427).

Akishinodera Hondō: cf. note 95 for earlier history; mentioned by Hattori, *op. cit.*, p. 157, as a re-erection of early Kamakura.

interior treatment, with all suggestions of structural function eliminated.⁴²⁰ Kikōji is almost unique in Japanese architecture of the traditional type, as a two-storeyed hall which is actually open for its full height inside. Such a form is a commonplace in the Zen style, and has its roots in a deep-seated Chinese love of towering interiors. It had existed in the Nara period, of course, in the Daibutsuden; but there was made essential by a colossus, and was counteracted by a corresponding enormous scale in all other dimensions. The length and depth of the Kikōji hall are unusually short in comparison to its height; and if the building really reproduces the general proportions of a Nara period original (as its details suggest), the latter must have been linked at least distantly to the Chinese type of lofty pavilion seen at Tu-lo-ssū.

The one marked variation from the Nara plan formula within the group occurs in the main hall of Futaiji. The whole building is five bays by four, with the traditional four-sided aisle space and the hipped roof of monumental tradition. The aisles, however, do not form a continuous ambulatory, but are interrupted to east and west of the chancel, where each has been used to make a small, closed chapel, one bay square (fig. 183). The western houses a minor altar, with an image of the temple's founder of the early ninth century, the cloistered Imperial Prince Abo-shinnō 阿保新王, son of the Emperor Heijō. The eastern, preserving a memory of the fusion of Buddhism and Shintō which since the Restoration has been dissolved, is devoted to the Sun Goddess, Amaterasu-ō-mikami. Around the chancel images, *pradakṣiṇa* is still possible because the *shumidan* platform occupies only the middle bay out of the chancel's width of three, and the flanking bays open into the rear aisle. The plan, all the same, furnishes a sign of the breakdown of Nara tradition even at its most conservative center; its cavalier treatment of the ambulatory may be due to the fact that Futaiji is a temple of the Shingon sect.

Kamakura halls of developed ground-plan and section are in general found in temples of Tendai and Shingon; and the rare exceptions to this rule seem to reflect the influence of esoteric worship on the older sects of Nara. The outstanding example of the latter category is the Shōryōin of Hōryūji, a subsidiary icon hall formed by alteration of the south end of the old eastern dormitory block. Here, although the main image adored is that of Prince Shōtoku, one of the outstanding figures of pre-esoteric Buddhism, its installation in a closed shrine and the whole character of the interior are in full esoteric style (fig. 187).⁴²¹

A good deal of variation exists among the buildings remaining from the period, but there is a sufficient underlying resemblance to permit their discussion as types rather than individual monuments. It is preferable to begin with the products of esoteric Buddhism itself, rather than with somewhat exceptional outsiders like the Shōryōin. In the general

⁴²⁰ Comparable, e. g., to the Amida hall of Shiramizu.

⁴²¹ Cf. Hattori, *op. cit.*, pp. 116 ff.; Amanuma, *Shiyō*, pp. 243-45, pls. 64-65; *Zūroku*, Kamakura vol. i, pp. 214-25. The first alteration which turned what had once been the end of the east dormitory into a place of worship dedicated to Prince Shōtoku, took place in 1108-21. The *Kokon-mokurokushō* of 1235-37 (*D-n-bukkyō-zensho*, cii, p. 105) says that the portrait of the Prince was installed there in 1122; and also speaks of "three large chambers at the south . . . of the eastern dormitory . . . newly made over into the Shōryōin." 東室 . . . 南三房新爲聖靈院. The existing building seems to be the one thus referred to; presumably it is a re-erection (at the beginning of the 13th century) of the 12th century original, in somewhat altered form.

terms followed in discussion, it will be apparent that the standard halls of Tendai and Shingon are separated by only minor differences, the latter being often simpler in layout but occasionally as elaborate as any building of the rival sect.

The fully developed Shingon icon hall is illustrated by two large and famous pilgrimage centers in Ōsaka-fu, Kanshinji and Kongōji; fairly close together in the hills on the way to Kōyasan, closely related in plan, and both apparently of the fourteenth century (figs. 155-58, 159).⁴²² Both are seven by seven, overall, and have as public space a *raidō* two bays deep all across the front, separated from the rest by the usual barrier of grilled doors and transoms. At Kanshinji, the ambulatory formula has been preserved in the *naijin* by an aisle one bay wide on ends and rear. This is not continuous, however, the end aisles being closed off from the rear, to serve as subsidiary chapels with an altar against the back wall of each. The chancel area is five by four (fig. 157). Of this the *shumidan* altar occupies three by one, across the middle of the back wall; it is surrounded by columns, and is treated as three separate, enclosed shrines, with doors opening to the front. In the space south of the platform, the Twin *Mandaras* hang on the axes of its ends, each suspended between two columns. The effect of this layout is to separate the chancel into three sections; a central area three bays square for the three ritual altars (one for the *shumidan*, and one for each of the *Mandaras*); and a passage on each side, giving access through sliding partitions to the rear aisle. The ceiling treatment, however, is designed to emphasize the whole chancel as one area, surrounded by a bracket "cornice," and given only minor interruption by the *Mandara* axes. All of the Kanshinji ceilings are flat and coffered, and at the same height; the chancel is given a look of greater loftiness than the rest, because it lacks the heavy transverse beams which run across the *raidō* and aisles. At the front of the building is a three-bay porch, held on square pillars, and covered by an extension of the main roof. This last feature, called the *kōhai* 向拜, is typical of Kamakura temples and continues, as an element of convenience for worshippers, throughout the subsequent course of Japanese architecture. It is not found in existing Heian remains, and being very uncommon in China can hardly have existed in the Nara period. The

⁴²² *Kanshinji*: cf. Hattori, *op. cit.*, pp. 312 ff.; Amanuma, *Shiyō*, pp. 284 ff., pls. 100-01; *Zūroku*, Kamakura vol. ii, pp. 172-8; Masuyama, *N-shaji-shiryō*, pp. 119-21. First flourished in the early 9th century after establishment by Kōbō-daishi and his disciples. Related texts are given in *Kōjiruien*, *Shūkyōbu*, iv, pp. 5 ff. A "temple record" not found there states that the existing main hall was rebuilt in 1334 by the celebrated partisan of the Imperial house, Kusunoki Masashige 楠木正成 (1294-1336); this according to Hattori and Amanuma, who agree that the style of the building conforms perfectly with this late Kamakura date.

Kongōji Hondō: related texts given in *Kōji-ruien*, *ibid.*, pp. 1-4. Here the history begins late, in the Shōan era (1171-4), when the temple was founded by Priest Akan 阿観 through the piety of a daughter of the Emperor Toba. At the time of the rival northern and southern courts, Kongōji, like Kanshinji, served as a detached palace for the Emperor Go-murakami, exiled from Kyōto (r. 1339-67). The Hondō, first built in 1178, is in its present form controversial; some holding that it is a new erection of Toyotomi Hideyori in 1606, others that it was restored at that time, when the monastery was revived as a whole, but that its basic framework is still Kamakura. At least it is known that the Hondō was not involved in a disastrous fire of 1360, which destroyed most of the rest of the buildings. Presumably its erection (after a probable loss of the original structure of 1178) took place when Kongōji became associated with the fortunes of the southern court; the place was declared an "Imperially Vowed Temple" 勅願寺 in 1336, and at that time may well have received a grant for construction purposes.

evidence of Fujiwara paintings shows that narrow porches of the same type were common in contemporary palace and mansion architecture at least in the eleventh century.⁴³³ These undoubtedly represent the source of the motif; whether it was adapted at that period to religious use as well, in buildings now destroyed, is unknown.

The cross-section of Kanshinji, with its ceilings flat throughout, is particularly far advanced in obliterating every memory of the front aisle; the *raidō* exists in every sense as a room two bays deep. Kongōji is in this respect more conventional, following a formula in frequent use (fig. 159). Its *raidō* also is an uninterrupted open space; in the ceiling treatment, however, the tradition of the ambulatory has been preserved, and so the ceiling area above non-existent front and end aisles is covered by the old aisle formula of exposed rafters, while the rest is flat. Exposed rafters also cover the aisle spaces in the *naijin*. In this portion of its hall, Kongōji is highly unconventional. Chancel area, with its division into a central space for *shumidan* and *Mandaras*, and passages at either side, is the same as at Kanshinji. Between these passages and the end isles, the north-and-south lines of columns have been omitted. The effect of the whole plan is that of three spacious *raidō*, an almost square sanctuary, and a narrow rear aisle; a layout which we shall see followed in later Buddhist architecture, by the Jōdō sect in particular, and which is in marked contrast to the ambulatory formula.

The chancel ceiling of Kongōji is coved and coffered. In front of the building is a one-bay porch; balancing this at the rear, with the same amount of projection, is an extension three bays wide, comparable to the *raidō* in front but made for the convenience of the priests rather than that of the lay congregation.

A number of other Kamakura period halls show the same standard of plan on the reduced scale of five by five. Typical examples are the main halls of Shōshōin in Wakayama; of Murōji in Nara-ken; of Ishideji in Ehime-ken; of Myōrakuji in Fukui-ken; and of Chōjūji in Shiga-ken.⁴³⁴ The last of these belongs to Tendai, showing that the differences of

⁴³³ Single-bay porches are shown in the two datable remains of mid 11th century painting, the pictorial biography of Prince Shōtoku from the Edono of Hōryūji, and the Jōdō series in the Hōdō (cf. *Bukkyō-bijutsu*, xviii, illust. p. 69, and *ibid.*, xix, respectively).

⁴³⁴ *Shōshōin Hondō*: cf. Amanuma, *Tōyō-bijutsu*, i, pp. 22 ff.; *Zūroku*, Kamakura vol. i, pp. 298-307. First established in the 9th century, under the direction of the celebrated Tendai monk Enchin 圓珍; at which time it was located in Sanuki, on the island of Shikoku. All but the main hall was destroyed in 1184 in fighting between the Taira and Minamoto. In 1302 it was transferred to the coast of Kii, near Wakayama. Warfare at the end of the 16th century caused it to be moved again, though within the same district; in 1600 it was settled on its present site in Wakayama city by the daimyō of the region, Asano Yoshinaga 淺野幸長; so tradition states. Data for the existing hall is lacking, but its style clearly places it in late Kamakura; i.e. subsequent to the transfer to Wakayama in 1302.

Murōji Hondō; (or *Kanchōdō*): cf. Amanuma, *Zūroku*, Kamakura vol. i, pp. 250-55; Kawakatsu, *Kokenchiku-nyūmon*, pp. 146 ff. See note 262 for previous temple history. Dated only by its style.

Ishideji Hondō: cf. Amanuma, *op. cit.*, pp. 418-29. Said to have been first founded as an exoteric temple in the 8th century, and then revived under Shingon auspices in the 9th; the miraculous stone connected with this second establishment giving the name. The site famous for its cherry trees, which brought the visits and praise of two Emperors. A landslide buried the buildings in 1677, necessitating rebuilding thereafter. A tradition exists that the present hall was a re-erection of the later 15th century; but this is rejected on stylistic grounds by Amanuma, who believes it included in the Kamakura period.

Myōrakuji Hondō: I find this mentioned only in the general index of Japanese artistic and architectural

disposition between the two orders were of minor importance. Myōrakuji and Chōjūji are perfectly regular in plan, each with an open *raidō* two bays deep all across the front, and the *naijin* filled in normal fashion by a three by one *shumidan* (fig. 160). In front of each is a three bay porch. The Twin *Mandaras* and their subsidiary altars are omitted. Ishideji is identical except in an omission of the porch, and in a less conventional *naijin* focus; the *shumidan*, approximately two by one, is enclosed by four columns which line up with none of the others (fig. 161). So cavalier a design, unheard of in the Nara period, seems a sign of the gradual liberation of planning made possible by the Japanese invisibly framed roof, the column supports of which may actually vary within a wide radius of convenience. Freedom is carried even further at Murōji, to produce a plan even more daring than that of Kongōji described above. The five by five hall, with an area of 25 square bays, has only four structural interior columns, all on the partition line between *raidō* and chancel. Outside of these, the only elements breaking the openness of the interior are four very slender pillars, two on each side of the chancel, which hold the Twin *Mandaras* (fig. 162). The building is not very large, it is true. Much more extensive open areas occur both earlier and later in architecture of monumental scale in Japan; the boldness here is a defiance of habit rather than of structural limitations. The *shumidan* has been pushed far to the rear, into the last bay. There is a doorway in the exterior wall behind it, proving the possibility of passage; but its position was obviously not meant to serve the *pradakṣiṇa* usual in other sects than Shingon.

The main hall of Shōshōin, still in the five by five category, is somewhat exceptional (fig. 163). Its details imitate those of the "Chinese" style typical of Zen architecture; the plan, on the other hand, shows the freedom of column spacing to be expected in Japanese esoteric design of the Kamakura period. Here the shift has been made in the *raidō*, which instead of being the normal two bays deep consists of a single enlarged bay in depth, just half again as large as the rest. The roofing of this fore-hall suggests that the change was made as an experiment with one of the novelties of the Zen style, the exposed interior cantilever.

The cross-sections of the Shingon-Tendai group of five by five icon halls possess a marked variety, characteristic of the freedom of design made possible by the Japanese double roof. Murōji has flat, coffered ceilings throughout. Ishideji has a coffered chancel, but its *raidō* rises into a pseudo open roof. In Chōjūji and Myōrakuji, both chancel and *raidō* are covered by the latter.

A very closely related Shingon sub-group differs from the standard described above only in the detail that the *raidō* is not entirely unobstructed but contains one column at each end. The difference implies a slightly greater retention of the structural traditions of the past. I know of two Kamakura halls in this category, belonging to Daizenji in

monuments prepared by Taki, *Nihon-kobijutsu-annai* 古美術案内, i, p. 413 (Tōkyō, 1931), where it is listed as Kamakura for stylistic reasons, in default of other evidence.

Chōjūji Hondō: once more said to go back to the 8th century, and to have been revived, under new Tendai auspices, at the mid 9th. Later favored by grants from Minamoto Yoritomo in 1183; from Hōjō Sadatoki in the 13th; from Ashikaga Takauji in the 14th; then fell on evil times, so that in the Edo period only the single hall, called Jizodō from its main icon, was still standing. Dated by stylistic evidence.

Yamagata-ken and to Jōdōji in Hiroshima-ken; in addition might be cited the main hall, or Yakushidō, of Jōdōji in Hyōgo,⁴³⁵ which seems actually to be a re-erection of the early fifteenth century but perhaps follows the ground-plan of its original of the end of the twelfth (fig. 164). In all of these, conventional structural formulae are much more obvious than, for example, at Murōji. Ceilings are not flat throughout, the aisles—or areas corresponding to aisles—being covered by exposed rafters. The *raidō* thus in their ceilings retain a strong sense of a room surrounded on front and ends by an aisle; the treatment which we have already seen at Kongōji on a larger scale, here with the sense of enclosure emphasized by the columns dividing off the ends of the room. In all three of these buildings the ceilings, except above the aisle areas, are flat and coffered.

I have given this sub-group the importance of individual treatment for two reasons. It furnishes a stage of transition between the major divisions of the Shingon and Tendai types, requiring only a further step to become representative of Tendai practice; thus it emphasizes the close connection of the two, and suggests even that the distinction which I have drawn between them may be based on accidents of preservation, rather than any basic difference arising from variations of belief and ritual. Tendai and Shingon, after all, occupied a wide common ground and varied only in extremes.

The transitional group is interesting, in the second place, for the unusual reason that it possesses a very close parallel in China. This connection has been mentioned in a previous chapter; thus the Liao dynasty Ta-hsiung-pao-tien of Shan-hua-ssū in Ta-t'ung-fu, except that it is seven bays long instead of five and lacks any sort of partition between the area corresponding to the Japanese *raidō* in front and the chancel behind, presents precisely the same layout of columns (fig. 34). The parallel is most direct in the case of the fifteenth century Yakushidō of Jōdōji, since that is actually built in the imported "Indian" style, with a single-shell roof of Chinese design (fig. 164). In section there is the difference that it is covered, except over aisle areas, by a flat ceiling, while the Chinese hall has a true open roof. In its axial *raidō* bay, however, the Ta-hsiung-pao-tien actually uses, for greater dignity, the same treatment which is typical in Japan, the northern half of the area

⁴³⁵ *Daizenji Hondō*: usual tradition of a first founding in the 8th century; in 1197 given lands by Minamoto Yoritomo, and thereafter became a temple subsidized to pray for the Kamakura Shōgunate. Disastrous fires in 1243, 1270; the Hondō rebuilt in 1286 by Hōjō Sadatoki, survived the next great fire in 1336, and assorted misfortunes thereafter, and is the existing hall.

Jōdōji Hondō (Hiroshima): cf. Amanuma, *Zūroku*, Kamakura vol. i, pp. 380-9. Here the fabled first establishment goes back to Prince Shōtoku. Long a dependency of Kōyasan; in the reign of Go-shirakawa (1155-7) became an "Imperial Vowed Place"; at the end of the 13th century was abandoned. In 1306 built up again with the arrival of priest Jōtō 定澄; a fire in 1325; gradual recovery during the next quarter century. There remain today from this period the main hall, built in 1327, the Tahōtō of 1329, and the Amidadō of 1345. Related texts are given in *Kōji-ruien*, *Shūkyōbu*, iv, pp. 901 ff. A Jōdōji document, here quoted (p. 902), records that the Hondō erected by Jōtō in 1306 was '3 ken 4 men'; i.e. the same width as the existing hall, but apparently without a *raidō*. This second restoration seems to have been assisted by the patronage of the Emperor Go-daigo.

Jōdōji Yakushidō (Hyōgo): cf. Amanuma, *Zūroku*, Muromachi vol., pp. 146-61; Hattori, *N-kōkenchi-kushi*, Kamakura vol., pp. 213-7; and note 367 above. The original hall, built in 1193, was burned in 1294, and re-erected in 1407, according to temple tradition; the late date is accepted by Amanuma and Hattori as explaining its corrupted style, partly *Tenjikuyō* still, and partly *Wayō*, in contrast to the purity of the Jōdōdō on the other side of the temple square.

covered by a coffered ceiling and the southern (corresponding to the front aisle but with columns omitted), covered by exposed rafters. I have already discussed this similarity in connection with the problem of the origin of the *raidō* in Japan.⁴³⁶ The further question might be posed whether the Yakushidō, so strongly Chinese in construction and details, is not as Chinese in plan as well. Its original was set up, at the same time as a companion hall, the Jōdōdō still standing, in the last decade of the twelfth century; the priest responsible for the work was the same Shunjōbō-chōgen who was directing the use of methods he may have seen in China in rebuilding Tōdaiji at the same period; the head artisans may have even been the Chinese mentioned in Tōdaiji records. By these terms the fact that the Yakushidō ground-plan is almost exactly the same as that of Taizenji and Jōdōji in Hiroshima, would indicate not merely that it was a common Japanese type, but that the ground-plan of Sung which Shunjōbō-chōgen imported was the same as that already existing in Japan. An enthusiast might even advance the claim that the original of the Yakushidō, completed according to the temple history in 1193 and hence considerably earlier than any other example of the developed esoteric plan remaining in Japan today, was the actual first appearance of that plan in Japanese use.

Against this hypothesis stands the fact that Heian texts record the earlier stages of the esoteric plan—already close to the later—as early as the tenth century. Again, it would not be easy to prove that the present Yakushidō, dating from 1407, is good evidence for its predecessor. Its details retain the “Indian” style, but with a strong admixture of purely Japanese tradition. The plan is quite unlike those of the other two remaining *Tenjikuyō* halls in Japan, the Jōdōdō facing it, and the *sūtra* repository of Kami-daigo. The former is a pure chancel-and-ambulatory building, the latter the same plus a lean-to extension on the front. The record of erection of the original Yakushidō describes it as a “high hall 高堂, nine *ken* four *men*.” The phrase is puzzling, since it is also used to describe the Jōdōdō, which would normally be called “one *ken* four *men*.”⁴³⁷ Nine *ken* in Heian terminology means a building eleven bays long, a scale usually reserved for the most monumental architecture (although exceptions like Jōruriji show that it was possible in a country temple). In one or both cases, the “nine” may be a clerical error. “Four *men*” can mean nothing but a four-sided aisle, however; and by this the hall of 1193 must have had a chancel-and-ambulatory plan like its companion, with the general layout of the Nara period Hokkedō, or any number of other medium-sized constructions of traditional type. It seems very probable, therefore, that the now existing Jōdōji hall of Yakushi is not the same in plan as its predecessor. In addition, as I have said in the previous chapter, its ground-plan link with the Ta-hsiung-pao-tien may well be only accidental, or at most a sign of distant derivation from a common source. The latter hall is unique, to the best of my knowledge, among known Chinese remains; the other Chinese buildings of Ta-t’ung-fu or elsewhere, allied to it in style and freedom of column-spacing, are quite unlike the Japanese formula.

The ground-plan which may be taken as the Tendai standard (so far as one exists) differs from the Shingon type in two particulars.

The *raidō* in this case is not simply one large, open room, but is subdivided unmis-

⁴³⁶ See above, pp. 190-1; and, for the Ta-hsiung-pao-tien. *Bull.* iv/3, 4, fig. 112.

ably into two sections, capable of being separated in use by a railing barrier. The open room exists as an intermediate space, sometimes described as such by the term *chūjin*; at the front and on either end it is enclosed by a normal aisle, with columns between. A plan of such character is that of the large seven by six main hall of Kakurinji, in Hyōgo-ken, re-erected in its present form probably in the later fourteenth century (fig. 165).⁴³⁷ The whole building is almost symmetrical about both axes, an aisle running all the way around, and the large, open *chūjin* balancing the large, open chancel on the other side of the grilled partition. The only disturbing feature, on paper, is the fact that the *shumidan* with the wall and columns behind it have been pushed a foot or two to the rear, narrowing the north aisle and increasing the area in front available for ritual use. Actually the symmetry is not so obvious as it appears, between the secret and public halves; the transverse bays are deeper in the former, the ceilings are at a different level, and the treatment of the aisles is noticeably less decorative than in front.

Almost the same layout exists in the same prefecture at Taisanji in a main hall perhaps erected in 1304.⁴³⁸ This plan is more regular, since the columns behind the *shumidan* are on line with the rest. There are also columns which divide the platform altar in front into three sections. This complete enclosure of the altar seems to have been optional at the period. It is absent at Kakurinji, the *shumidan* being merely a platform in front of a wall, as in the Nara period (though of course with radically altered details). With it, the main images may be hidden in small rooms formed by the architecture of the building itself; without it, secrecy is maintained by placing them in detached shrines, which at this period are usually miniature pavilions of considerable elaboration.

The Tendai temples in the neighborhood of Lake Biwa, in Shiga-ken, closely dependent on the rival headquarters of the sect at Onjōji and Enryakuji, possess an additional peculiarity of plan; the enlargement of the north aisle into a room of ample size, used for service. This feature appears in the neighboring main halls of Kongōrinji and Saimyōji (figs. 166, 177);⁴³⁹ in the Momoyama main hall of Chōmeiji 長命寺 (where the greater area has been formed by a later addition to the original rear aisle); and in the Edo "golden" hall of Onjōji.⁴⁴⁰ In the above the rear area is completely or partially open, and

⁴³⁷ Cf. Hattori, *op. cit.*, pp. 322 ff.; Amanuma, *Shiyō*, pp. 328-30, pl. 113; *Zūroku*, Muromachi vol., pp. 122-44. Kakurinji claims an antiquity reaching even to pre-Shōtoku days in the 6th century; its existing Taishidō, of the Heian period, is said to have been first erected under Shōtoku's patronage. The main hall was first raised in 718, but its later history and eventual re-erection are not clearly established.

⁴³⁸ The *Taisanji-annaiki* 案内記, a handbook of information procurable at the temple, states that it was founded by the vow of the first Fujiwara, Kamatari, and that a formal monastery was finally completed in 725 by his grandson Umakai 宇合. The temple now claims that its main hall goes back to that date. The year 1304 is given by Taki in his *Kobijitsu-annai* ii, p. 366, with the standard termination, "it is said."

⁴³⁹ *Kongōrinji Hondō*: a temple tradition is quoted in *Kōji-ruien*, *Shūkyōbu* iv, pp. 662-63 (in the gazetteer of Ōmi), that no fires had occurred since its foundation in 737. But the Hondō is clearly no Nara building, and is probably datable rather by the inscription on its (stylistically homogenous) altar of 1288. Amanuma, *Zūroku*, Kamakura vol. i, pp. 275-77; Hattori, *N-kōkenchikushi*, Kamakura vol. i, pp. 84-90.

Chōmeiji Hondō: pretends to go back to a foundation by Prince Shōtoku as a result of one miracle, and a rebuilding by the Emperor Tenchi because of another. Later revived in the early 12th century, and

roughly comparable to the *raidō*. In two of the great Hieizan halls, the Kamakura Shakadō and the Edo Yokawa-chūdō,⁴⁴⁰ the same increase has been achieved by doubling the rear aisle. In some instances this room, called the *kojin* 後陣 or "rear space," is used for worship as well, and houses altars set against the *shumidan* wall, facing north. Elsewhere it seems purely utilitarian, and in the present diminished circumstances of the lesser Tendai temples, is often used for storage.

The most elaborate example of what I have called the fully developed "Tendai" type of plan known to me is found, strangely enough, far away from the centers of Kamakura culture on the southern island of Shikoku, in the main hall of Taizanji, erected in 1305 (fig. 167).⁴⁴¹ As if to prove the futility of classification, the building belongs to Shingon. Its overall size is seven by nine, a remarkable inversion of the proportions of the Nara ideal. The public area is four bays deep, of which a railed-off *chūjin* forms half; at the rear is a two bay deep *kojin*, used for worship.

A few Kamakura buildings for one reason or another are exceptional in plan, even though of normal Tendai or Shingon connections. One of the two Kamakura halls in Kyōto, the Shingon main hall of Daihōonji set up in 1223, is exceptionally timid in plan, not one interior column being omitted.⁴⁴² The contrast between such a complete gridiron of supports and the wide open spaces seen, for example, at Murōji and Kongōji, could not be more striking. Since this building is of early Kamakura date, while the more advanced layouts are in general dated in or attributable to the fourteenth century, it seems to furnish evidence that much of the development of the mature esoteric plan took place in middle and late Kamakura. Daihōonji is also unusual among existing remains in having an open porch all across its facade, in the style of Tōshōdaiji. I know of this treatment in only one other Kamakura building of traditional Japanese style, the main hall of Kikōji near Nara, which as mentioned at the outset of this chapter is one of the members of a revivalist group generally faithful in re-erection to their Nara predecessors. If there were any clear record of a Nara period original of the Daihōonji hall, it might be supposed that

extensively enlarged in 1184, through the generosity of Sasaki Sadatsuna 佐佐木定綱 (then governor of the province, a Minamoto supporter). Burned down by Nobunaga's soldiers in 1573, rebuilt in 1590.

Onjōji Kondō: the old Kondō having been transported to Hieizan (see above p. 170 and note 289) by Hideyoshi, his wife in 1601 erected a new hall; cf. *Kōji-ruien*, iv, p. 616.

⁴⁴⁰ *Enryakuji Shakadō*: cf. note 289. The hall removed from Onjōji may perhaps have been the one whose erection is recorded for 1347 in a temple document given by *Kōji-ruien*, iv, p. 615.

Yokawa-chūdō: first erected in 848 by Jikaku-daishi to form a new northern nucleus on Hieizan. The present building dates from 1604, a generation after the destruction of the whole monastery by Nobunaga.

⁴⁴¹ Cf. Amanuma, *Zūroku*, Kamakura vol. i, pp. 398-409. Traditional founding goes back to the 6th century, at which time the monastic buildings were erected in a single night. Donations of images and *sūtras* received from Emperor Shōmu, Empress Kōken (who greatly increased the monastic layout, and made it an "Imperial Vowed Place of Worship" 御願道場), Emperors Go-reizei in 1062, Go-sanjō in 1069, Horikawa in 1087, Toba in 1108, Sutoku in 1124, Konoe in 1142. All these icons were figures of the Eleven-headed Kannon, which are still enshrined in the hall today. The latter was built in 1305 by the then abbot, through the conversion of the locally dominant Kawano 河野 family, and was restored by the same clan in 1485.

⁴⁴² Established by priest Gikū 義空 (died in 1241), who first set up a small building in 1221, and in 1223 built the existing hall.

the portico in this case also was imitated directly in re-building. The temple, in common with all self-respecting Japanese establishments of any degree of antiquity, has its pedigree going back to the earliest days of Buddhism on the island; but it is more probable that it was first founded at the beginning of Kamakura, so that the hall is actually a new erection. The portico must in this case be explained by the traditionalism which was a strong factor in Kamakura architecture, balancing advances in plan and section by a close adherence to Nara precedent in other fields.

The Kamakura icon halls formed by the addition of a *raidō* to an earlier nucleus constitute an additional sub-group. The example preserving both elements in purest form is the Hokkedō of Tōdaiji (figs. 21, 172). Its closed half remains from the Nara period unchanged except by the removal of the old facade wall to permit passage. The *raidō* exists without elements of complication as one large room, the same length as the original hall.⁴⁴³ At present the whole complex is covered by one ingeniously adapted roof, which must have been in existence in approximately the same form, at least, in Kamakura; since the gable field on the south which is integral to its design exposes pseudo-structural timbers in the style of that period. The point is somewhat difficult to understand in written description merely, but I shall try to make it clear. The ground-plan and section of the present Hokkedō suggest two buildings linked by aisles between. This impression is fortified by the treatment of eaves; on the exterior, each major element has its own corner a few feet away from the other's, with diagonal beams and brackets like an independent building; the two lines of rafters, running down from either side, disappear into the interior (fig. 173). The two intermediate aisles are covered by a flat roofing (of course underneath the main roof), as in the case of the typical Hachiman shrine, the classic Japanese example of parallel buildings linked by a low passage between (fig. 38). The space between this flat cover and the main roof is visible from the outside, being closed on the wall line only by a lattice. All this gives a very strong sense of separate main elements. If the separation were complete, there would be two parallel roofs, as in the Hachiman style. Instead, there is a somewhat awkward overall form, achieved by combining the hip roof of the original block, running east and west, with a hip-and-gable over the rest, running north-and-south. The design gives an open gable field on the south facade, the details of which seem contemporary with those of the rest of the Kamakura addition. The present combined roof

⁴⁴³ Cf. note 116 above, and Fukuyama, "Hokkedō," *Tōyō-bizyutu*, xxiii. The inventory of 984 preserved in the *Tōdaiji-yōroku*, iv (Fukuyama, p. 48), proves that the "Kenzakuin" at that time already possessed a "5 ken, cypress-shingled *raidō*," in addition to its "5 ken, 1 men aisle, tile roofed main hall." There can be no question but that the latter refers to the old 8th century Hokkedō nucleus, although the phrasing is peculiar. The 8th century Hokkedō block alone would normally be described as 3 ken 4 men. Perhaps the "1 men aisle" — 面庇 of the inventory was intended to indicate not any part of the ambulatory, but a passage across the front linking the main hall to the *raidō*; while the main hall itself was in this special case considered as a unit five bays across the front. At any rate, it is clear that it and the *raidō* were separate units in the 10th century, if only because of the difference between their roofing materials.

For the existing *raidō*, cf. Amanuma, *Zūroku*, Kamakura vol. i, pp. 176-85; Masuyama, *N-shaji-shiryō*, pp. 56-8. No evidence attests the date of its re-erection except architectural style; here, since the *Tenjikuyō* used is perceptibly less pure than that of the Nandaimon, a 13th century attribution seems justifiable. The kingpost and beam combination in the exposed gable field on the south shows no stylistic variation from the rest, and so is probably of the same period.

was thus in all probability constructed at the same time as the present *raidō*. The unusual persistence elsewhere of the sense of separate buildings may be explainable by the method of construction used in the addition. The nucleus, of course, already possessed eaves turning the corner on the south and rafters running down a southern slope; these were left undisturbed. The *raidō* was built obviously in a form intended to harmonize with that of the nucleus, and hence was given an open roof on the interior. Being a Tōdaiji work carried out not too long after the re-building of the main architecture of the monastery in the "Indian" style, it was framed still in the imported fashion; that is to say, with the single-shell roof characteristic of China at all periods. This means that the forms used on the interior to harmonize with those of Nara style in the nucleus,—instead of being merely decorative as in contemporary Japanese practise—are truly structural. The rafters and diagonal roof beams integral to the interior design necessarily emerge; and since the *raidō* has four interior corners about which its members turn, it must have four exterior corners also, in spite of the incongruity of two of them being under a continuous roof. The odd result is inevitable to such a combination of Chinese and Japanese ideas. A Chinese architect, placing two buildings side by side, would have covered these with two separate roofs, even if their intersection was an awkward one. The Hokkedō represents two buildings carried out individually in Chinese style, one in the T'ang formula used in the eighth century, the other in the "Indian" style of provincial Sung, each in its construction making the strongest possible demand for a roof of its own. The one dominant Japanese feature in the design, the single roof enclosing both, is also its one departure from logic.

The dilemma encountered in the Hokkedō may be clarified by comparison with a similar complex in the Mandaradō of Taimadera (fig. 168).⁴⁴⁴ In this case also the nucleus is a Nara one, although invaded to some extent by Kamakura members as the Hokkedō sanctuary is not. More drastic reorganization here has produced a building which in both plan and elevation seems entirely coherent. There is no sense of an old icon hall enlarged merely by placing an additional enclosed area in front of it, and the whole finally pulled together by one roof. The original has lost its front aisle, so that the old chancel and the new *raidō* are adjacent. (The platform altar stands in the middle of the present sanctuary, so that the latter seems to conform to the ambulatory formula; actually, in terms of column spacing, there are aisles only on ends and rear, as the cross-section clearly shows). It is difficult to imagine, therefore, any gradual accretion in the Mandaradō; the original hall first expanded by a *raidō* set in front of it, and the whole perhaps subsequently surrounded by a unifying aisle. When the *raidō* was added at Taimadera, the original itself was altered, probably to take its place in the design as it stands at present without preliminary stages.

⁴⁴⁴ Cf. Hattori, *op. cit.*, pp. 149 ff.; Amanuma, *Shiyō*, pp. 245-8, pls. 66-71; *Zūroku*, Kamakura vol. i, pp. 238-49. This building is of course bound up with the history of the famous *Taima-mandara*, traditionally woven by a Princess Chūjō (or by Amida and Kannon themselves, in human form) in 763. The work, whatever its origin, is clearly an 8th century one; and it is quite likely that a chapel was erected for it at that time, the members of which may still be discerned by their unmistakable Nara style, in the sanctuary of the existing hall. The latter is probably datable by the fact that the shrine in which a copy of the *Mandara* hangs is dated 1242, and the altar platform 1243, both by inscriptions. Presumably the original 8th century building was much damaged in the general fire of the Jishō era (1177-80), only a few chancel members remaining to be incorporated in the new structure.

The same possibility of an ill-connected exterior exists here as in the Hokkedō, since both major elements are covered in the same way by open hipped roof ceilings (the *raidō*'s hidden by a flat ceiling added later, or perhaps by a change of design during construction). Any inconvenient projections at the corners are hidden, however, first by a deep double roof, and second by an aisle running around the outside. Thus the elevations are perfectly regular, and disclose nothing of the complexity of the interior. The total plan closely approaches what I have called the fully developed Tendai type—the temple now belonging to Shingon.

In the case of the main hall of Saimyōji, already cited, it is the (orally expressed) opinion of Mr. Moku, superintendent of restoration of National Treasures in Shiga-ken, that the chancel nucleus of the building may go back as far as the ninth century. By this theory, the *raidō*, to judge from its details of bracketing, must have been added in early Kamakura; while the *kōhai* front porch—more advanced in details—and the extra service area at the rear were provided somewhat later in the same period. The cross-section of this hall illustrates the cavalier methods of roof reconstruction which must have been frequent from Kamakura on (fig. 77). The present roof has its ridge at the center of the whole building, including the front porch. Inside it is the unaltered framework of the gable of an earlier roof, slightly below and to the rear since it is centered on the building without the porch. Since the details of the visible gable field—king-post and inverted "V" braces—retain all the simplicity of the Heian style, the existing roof can hardly be much later than Kamakura; and may date from the addition of the porch.

The evidence of one further work of remodelling, performed probably during the Kamakura period, concerns the Shingon main hall of Ishiyamadera, in Shiga-ken (fig. 169).⁴⁴⁵ In the existing building, two periods of architecture are clear. The northern, closed half is a nucleus in characteristic Heian style, seven by four, with traditional chancel and ambulatory. The southern half is in the late, Momoyama, style natural to the erection under Hideyoshi attributed to it by the temple priests. A series of views of the hall in the pictorial history of the temple, *Ishiyamadera-engi* 石山寺縁起, painted around 1325, proves that this *raidō* was not original to the late sixteenth century, but must have been erected to replace an earlier one, in existence at least in the early fourteenth century. The present form is almost exactly like its pictured predecessor in layout (figs. 170, 171). Overall dimensions are practically the same as those of the sanctuary, and comprise the same seven by four bays. The earlier *raidō*, like the existing one, had in addition the same

⁴⁴⁵ For views of the Hondō in the *Ishiyamadera-engi*, see *N-emakimono-shūsei*, xix, pp. 26, 34, 61-2, 67, 73-4, 90-1, 92; xxi, pp. 6, 16, 21, 37, 44, 50. The same setting is given to scenes which go back as far as the time of the Retired Emperor Enyū (the end of the 10th century), but the scrolls certainly cannot be accepted as good evidence for anything but their own period.

Temple texts are given in *Kōji-ruien*, iv, pp. 629 ff. The fire of 1078 is attested both by the *Engi*—which states that the Hondō was burned, although its main icon miraculously escaped—and by the *Fusō-ryakki*, xxx, for that year, 1/2. *Kōji-ruien*, p. 632, also quotes the dedication record of Hideyoshi's benefactions, in 1602; at which time, "the main hall, with everything complete to the last detail, the Haiden of the tutelary divinity, the pagoda, etc., all were either restored or newly built" 本堂周備無殘所...或修理或新造也. The *Engi* also records the benefactions of Minamoto Yoritomo, although it says nothing about any additions to the main hall at that time.

column arrangement as that of the sanctuary, a five by two central space surrounded by aisles. Only differences of furnishing existed between the two halves of the whole building; the secret area had its altars and their equipment, while in the *raidō* the two northernmost bays of each end aisle were partitioned off to give privacy of worship to the great.

The whole of Ishiyamadera was destroyed by fire in 1078. A general rebuilding is recorded for 1096, which must account for the existing nucleus in Heian style. In the last decade of the twelfth century, extensive additions were made to the temple through the generosity of Minamoto no Yoritomo; the original *raidō* may well have belonged to this period.⁴⁴⁵ The fact of its identity in plan with the sanctuary block is important. Such symmetry exists in no other Kamakura building; in all existing versions, the *raidō* is either a single large room, or a central area enclosed by aisles on its front and ends only, designed to face the chancel and conceivable only as an appendage. In the Heian period, on the other hand, there is good evidence for the existence of chancel and *raidō* as identical blocks, each structurally complete in itself and with its own ambulatory. As we have seen, such a combination of independent buildings, separated by a corridor, seems to have been the plan of the hall of the Juntei-kannon of Upper Daigoji, in the twelfth century (fig. 90). The combination used at Ishiyamadera, where the two were brought together with only a partition between, is clearly a later stage; while it is less advanced, again, than the standardized plans of existing halls. All of those are more recent than the time of Yoritomo, so that the *raidō* as a work of the late twelfth century might represent a chronologically appropriate phase of transition. It is not at all impossible, indeed, that it was built with the nucleus in 1096, and that this explains the identity of dimensions in the two blocks. The Junteidō may well have been an old building when it was listed in the twelfth century inventory, and long since out of date in arrangement; there is no strong reason to suppose that the transition represented by Ishiyamadera could not have been in progress a century earlier. A *raidō* of some sort existed at Ishiyamadera as early as the end of the tenth century, for the word appears in a description of a visit to the temple in the diary *Kagerō-nikki* 蜻蛉日記;⁴⁴⁶ but what form it may have had then is uncertain. In favor of the late twelfth century erection of the form seen in the *Ishiyamadera-engi*, no more can be said than that the large size of the public portion, seven by four, suggests a time of marked expansion of the temple's fortunes like that known to have occurred in early Kamakura.

If the *raidō* was erected at the same time as the nucleus, in 1096, the two probably had separate roofs like the Myōrakuji lecture hall (fig. 91). If it was an addition of the late twelfth century, the two halves were probably covered by a single roof at that time; since this stage of structural development appears only a generation or so later in the Mandaradō of Taimadera and the revised Hokkedō. The present building is of course covered by one large roof of complex form; as in the case of the Hokkedō, there is a break in rafters and bracketing under the eaves between *raidō* and sanctuary, which testifies to the original independence of the latter.

The Kamakura and Nambokuchō periods, running down to the late fourteenth century, are the last great age of Tendai and Shingon architecture. In the thirteenth, the esoteric

⁴⁴⁵ In the edition of Yūmeidō 有明堂, Tōkyō, 1929, in the anthology *Heianchō-nikkishū* 平安朝日記集, p. 176: "... a high priest was standing in the *raidō* ..." 禮堂にたたずむ法師ありき.

sects had lost their long established supremacy, when the Chinese newcomer, Zen, became the religious partner of the military government. Late Kamakura buildings in the "Chinese" style testify clearly to the change in the current of patronage, which in another century was to leave the esoteric temples stranded. An even more important development, with more far-reaching consequences for the future, left no trace in remaining architecture, though its signs are clear enough elsewhere. The late twelfth and thirteenth centuries were a period of religious revival in which an enthusiastic faith in the Buddhist means of salvation was carried far wider and deeper than before, into every class of Japanese society. The founders of the great popular sects of modern Japanese Buddhism—Hōnen at the head of Jōdō, Shinran at the head of Shin, Nichiren—were the historically great figures of the time, far more significant as persecuted rebels than the arrogant abbots of Enryakuji who opposed them. The disintegration of the old patrician monopoly of religion, and the enormous plebian expansion of temple-goers which followed, created a new architectural problem, made the Kamakura ground-plan as obsolete as its Nara predecessor. A contemporary glimpse of this new situation, growing up from the bottom of society and destined to be satisfied only in the Edo period, is given in the pictorial biography of the immensely popular revivalist preacher Ippen (fig. 109).

BRACKETING:

Kamakura bracketing of the "Japanese" style marks no important advance beyond the T'ang tradition continued through Heian, except in the peculiarly Japanese field of sculptural decoration. Proportions and details of the conventional elements have been somewhat altered. The whole capital or bearing-block is lower in relation to its width; usually the depth of the socket has been markedly increased, until it accounts for more than half the "abacus." This is probably due to the example of the imported Chinese styles, in which such proportions are normal. The supposition is strengthened by the fact that in the earliest Kamakura architecture, predating the possibility of Chinese influence, the proportions of the bracketing elements are still close to those of Heian.⁴⁴⁷

The special bearing-block designed for the corner eaves bracketing, the *onito*, shows a slight alteration from the T'ang original, the corners of the "abacus" being somewhat pulled down into points. The process has hardly begun in the Tahōtō of Ishiyamadera at the end of the twelfth century. In some later buildings, like the main hall of Taisanji in Hyōgo dated 1304, the points are well marked. This again is probably to be traced to new influence from China, since the *onito* of the Engakuji relic hall are quite like those of

⁴⁴⁷ My statistics are very incomplete, and hence of only partial value. With respect to the proportions of the abacus alone, they indicate clearly that the earlier Heian period favored a block in which the socket was a comparatively shallow depression; in the Daigoji pagoda, the ratio of socket to space below is about 1 to 1.5. By the 12th century, a general increase in lightness of construction had brought this to about 1 to 1, the ratio seen in the Hōkaiji Amidadō or the Kami-daigo Yakushidō. In the Ishiyamadera Tahōtō, set up at the end of the 12th century, the ratio is almost 1 to 2, as if by imitation of earlier practise. In the *Karayō*, on the other hand, the increased socket depth brings a ratio of from 1.5 to 2 to 1; and it is this proportion which is found in Kamakura monuments in general, like the Saimyōji Hondō. The *Karayō* ratio derives unmistakably from Sung practise; the *Ying Tsao Fa Shih* recommends a relationship of 2 to 1 (see the Ta-t'ung monograph, *Bull.* iv/3, 4, pp. 144 ff. and figure 183).

Taisanji. The member, strangely enough, is entirely absent from all remains of north Chinese architecture. Its habitat, from which it came to Japan in the eighth and thirteenth centuries, must have been the south; unless it has disappeared entirely since the Southern Sung, investigation should reveal it in buildings of Chêkiang, Fukien, or Kiangsu.

Other features of traditional bracketing show, particularly in the fourteenth century, an infusion of new Sung ideas. The earliest instance is given by the Hokuendō, or north octagonal hall, of Kōfukuji, which was rebuilt in 1208,⁴⁴⁸ strongly under the influence of the "Indian" style or *Tenjikuyō* then being used on the reconstruction of the neighboring Tōdaiji (fig. 174). One of the latter's two prime innovations in bracketing, the use of transverse arms only in supporting the eaves, has been adopted here. The other, the insertion of bracket arms through the body of the column, has been omitted, however, the system mounting conventionally from the capital; and the intercolumnar bracketing is entirely *Wayō*.

The main hall of Jōdōji in Ōnomichi, dated 1327, uses bracket arms in the wall plane which are double rather than triple-headed, the so-called *futatsuto* 雙斗 with ornamental, moulded projections on each end of the arm (fig. 175). The device, thereafter popular, must also go back to a Sung prototype, since it appears for the first time in the founder's memorial chapel, Kaisandō, of Tōdaiji, probably a century earlier, and built in a style dominated by the *Tenjikuyō*. There the arm has the normal form, with two heads instead of three.⁴⁴⁹ The advance toward ornamentalization already marked in the Jōdōji main hall is carried a step farther at the Hachiman shrine in the precincts of the Hyōgo Jōdōji,⁴⁵⁰ the purlins of which are supported by *futatsuto* without any bearing-blocks, a foliated termination of the arm at each end being used instead (fig. 176). The gradual elaboration of the theme with sculptural detail, may be traced through Muromachi to a climax in Momoyama.

The influence of the *Karayō*, so strong in Muromachi that it almost brings an end to the existence of the *Wayō* as an independent style, is also apparent in earlier bracketing combinations. One of its details is the use of two lever arms, one above the other, in place of the single member of T'ang tradition. The duplication occurs in two otherwise predominantly *Wayō* buildings of the fourteenth century, the main hall of Kikōji and the Tahōtō of Jōdōji in Ōnomichi. Influence is only partial, since the arms have the sturdy shape of Nara still, rather than the slim delicacy of *Karayō* examples.

A cross-section through elaborate bracketing in the tradition of Tōshōdaiji or the Hōōdō shows a noticeable compression of step intervals. In the main hall of Murōji, for example, both the soffit boarding area and that of the "cornice" with its parallel strips have been greatly contracted, transforming the latter into a steep curve. In some exceptionally high forms of bracketing during the fourteenth century, where an additional tier

⁴⁴⁸ Cf. Hattori, *op. cit.*, pp. 143-8; Amanuma, *Zūroku*, Kamakura vol. 1, pp. 170-2. For the original hall, cf. p. 51 and note 86. This was first burned in 1049, and built again in 1092; the process was repeated in 1096 and 1108; and the third Hokuendō was then destroyed in the general fire set by the Taira soldiers, in 1180.

⁴⁴⁹ Cf. Amanuma, *Zūroku*, Kamakura vol. ii, p. 150.

⁴⁵⁰ *Ibid.*, pp. 296-303; apparently dates from the same period of reconstruction in the early 15th century as the Hondō.

and step are added, two such "cornices" are produced, one above the other. The lower, in such examples as the pagoda of Reizanji, dated 1283;⁴⁵¹ the Tahōtō of the Ōnomichi Jōdōji, dated 1329; the upper storey of Kikōji; the shrine on the altar of Kakurinji, dated 1397, and the bell pavilion of the same temple, dated 1407; has its stripping set, for contrast, in a diamond pattern rather than the usual parallels; a development which must be purely Japanese, since the "cornice" had long since been abandoned in China.

The evolution of *Wayō* style at its most characteristic, uncontaminated by foreign taste, is seen in its treatment of intercolumnar bracketing. The members used are the same as in the Heian period, the strut or the cut-out *kurinuki-kaerumata*. The former, being susceptible of little change, is only slightly altered. In the great east gate of Ishiyamadera, supposedly a part of the reconstruction of the late twelfth century, in the main hall of Kongōrinji, and in the main hall of the Hyōgō Jōdōji, rebuilt in 1407, its sides, instead of being vertical, splay outward at the bottom, a feature thereafter common. In one unique instance, the interior of the Hokuendō of Kōfukuji, the strut has a painted floral "leg" on either side. The idea is one already seen in the Heian Amidadō of Hōkaiji; the much heavier forms of the Hokuendō, however, suggest a three-dimensional ornamental brace rather than a linear enrichment, and it seems not impossible that they were intended to imitate actual wooden appendages on either side of the strut. The latter appear in late Kamakura architecture not as a bracketing element but in use as an inter-beam support, and will be treated under that section. They pass currently as an introduction from China. There is no trace of such ornamental forms in the *Tenjikuyō*, to whose whole character they are foreign. If an imported form was imitated in the Hokuendō of 1208, it must have reached Japan through some other channel than the "Indian" style then popular in Nara; possibly the painting was aided at some later period of repairs, when the legged strut was in common use.

The cut-out *kaerumata* passes, between the late twelfth and early fifteenth centuries, through a period of decided sculptural development. The Haiden, or hall of public worship, belonging to a supplementary shrine in the precinct of the Isonokami-jingū 石上神宮, possesses a form (used above an interior beam) of great simplicity, the only enrichment added to the legs proper being a tortuous series of small-scale mouldings applied against the underside (fig. 178). The whole form is noticeably more slender and non-structural than even that of Heian. Other small-scale shrines, like the Byakuzandō 白山堂 in the precincts of Onjōji, show the addition of mouldings along the bottom of the open area, resting on the beam.⁴⁵² This is developed into a floral knob, of the type already seen in the Uji-gami-jinsha, with attachments curving up to the leg on either side. Beautiful examples of this stage are preserved in the Taimadera Mandaradō—where the legs extend out to an unprecedented length—and in the Shōryōin of Hōryūji (fig. 187), where the floral finial and its attachments are of a neo-classic delicacy. These set the standard for the second quarter of the

⁴⁵¹ First foundation purportedly in the 7th century. Later favored by Hōjō Tokiyori, and its Hondō and 3-storeyed pagoda re-erected in 1283.

⁴⁵² *Isonokami-jingū* and *Byakuzandō*: cf. Amanuma, *Shiyō*, pp. 289-90, 291. The former shrine hall has only recently been moved to the precincts of Isonokami, having previously served as the Haiden of the tutelary divinity of a deserted temple, Eikyūji, 永久寺, at Uchiyama in Yamato. Both examples are dated by style.

thirteenth century. Later the finial rises to the top of the cut-out area, sending out branches, tendrils and leaves on either side which increasingly supplant the open space, until all that is left, from any distance, is a coloristic pattern of darks and lights (fig. 199). In the *kaerumata* of the Tahōtō of Jōdōji in Ōnomichi, as a representative of the early fourteenth century, the finial has been expanded to a wide-open blossom or flaming pearl; the side appendages have almost the quality of a Classical cornucopia; and butterflies hover over the flowers. All this is still very flat, and perfectly symmetrical. In the fourteenth century the design acquires a new pictorial quality, and approaches and finally achieves asymmetry. A charming version of the transitional stage is in the porch of the Goryō-jinsha 御霊神社.⁴⁵³ The motif is three sunflowers floating in conventionalized waves, formed by long, curving strips (fig. 180). One blossom rests at the center, a full circle; that at one lower corner is a quarter submerged, that at the other half hidden, while the wave lines are quite asymmetrical. In the Tahōtō of Daifukkōji⁴⁵⁴ asymmetry is complete, a bird on the left matching a full-blown blossom on the right. The development beyond this stage in later centuries is toward a constantly increasing plasticity of sculpture, and its increase in size until it conceals or entirely supplants the legs.

A new form of exterior roof support appears in Kamakura, the *tabasami* 手挟. Its use is limited to the new *kōhai* porch; the corbel is a large, wedge-shaped block which holds up the porch rafters inside the column line, and provides a means of transverse bracing much needed where porch and main block are not joined by transverse beams. First its inner edge, and then its surfaces are elaborated, and finally the whole block becomes the subject of decorative treatment. In one line of development the contour seems clearly influenced in its combination of curves by contemporary *kaerumata* legs, while the face may be covered with a more or less conventionalized floral rinceau in low relief. A simple version, without any surface decoration, is that of the porch of the main hall of Jōdōji in Ōnomichi (fig. 181). To this sort of outline may be added a channel running in more or less deeply to a bifoil end,⁴⁵⁵ as in the side halls of the 1320 Udamikumari-jinsha 宇太水分神社 in Nara-ken.⁴⁵⁶ This long indentation, as we shall see, is a feature of Kamakura projecting beam-heads under *Tenjikuyō* influence, and there eventually develops into the mouth of a quasi-realistic animal head. A second group of *tabasami* shows an even stronger *Karayō* strain. The whole block is more compact, and is carved in two or three large scrolls, with a long foliated tail running out from between them. The Zen precedent for the design is furnished, among remaining examples, by the mid fourteenth century Kannondō of Eihōji, where it is used as an ornamental termination rather than as a support (fig. 145). The main hall of Kanshinji, dated 1334-5, shows what must be an early combination of the *Karayō* idea with the other, since a *kaerumata*-like outline still persists, with its bifoil indentation. Elsewhere, as at Saimyōji, the scrolls furnish the only design.

Wayō rafters are set in two tiers, as before. The old distinction between rectangular

⁴⁵³ Cf. Amanuma, *Zūroku*, Kamakura vol. ii, pp. 184-9; dated by style.

⁴⁵⁴ Do., Kamakura vol. i, pp. 153-9; dated by style.

⁴⁵⁵ Do., Kamakura vol. ii, pp. 228-37; Kawakatsu, *Kokenchiku-nyūmon*, p. 89, fig. 55. The date of 1320 is given by an ink inscription in the center of the three parallel shrine halls.

and round cross-sections appears in only two halls, built in imitation of earlier, the Kannondō of Byōdōin and the main hall of Kikōji.

Columns are cylindrical. Square posts again are used in less important positions, typically for the *kōhai* porch. Their edges are chamfered, but to a slightly less degree than in Heian.

BEAMS IN THE WALL PLANE:

The Sanjusangendō⁴⁵⁶ illustrates mature Wayō practise in lateral bracing by beams (fig. 184). A column-piercing beam runs at the top, supporting the intercolumnar strut. Three deep, heavy, column-enclosing beams complete the equipment; one a little below the column top, a second under the windows, and a third, compound tier used as a sill. These run on an uncompromising horizontal, while the column-piercing beam usually curves upward slightly toward either corner, in preparation for the upward curve of the eaves; the discrepancy in direction is sometimes obvious enough to be visually disagreeable.

The end of the column-piercing beam from Kamakura on usually is prolonged for an appreciable distance beyond the corner column, and is given at that point some special treatment. In the case of the porch, it may become a bracket-arm which provides additional support to the purlin overhanging above it (fig. 181). In normal corner use, it terminates in some form of ornamental head, the so-called *kibana*. The idea probably is a Chinese one; at least the development of the *kibana* during Kamakura is under strong Chinese influence, divided between the two imported styles.⁴⁵⁷ One class adopts a form which we shall see is typical of the *Tenjikuyō*, the lower edge of the beam running out horizontally and the upper slanting down in a series of mouldings which sometimes are reminiscent of those of the Greco-Roman cornice (fig. 182). In the Kuginashidō 釘無堂 of Kozumi,⁴⁵⁸ the basic silhouette is elaborated by the same sort of long channel, leading in to a bifoil, which we have seen in the *tabasami* corbel. The top end also is curled up, suggesting a kind of snout; and the whole member, although made up of abstract mouldings, already looks like the tapir's head which, in the realistic development of Muromachi and Momoyama, it will finally become. The *Karayō* type of *kibana* is composed of scroll forms

⁴⁵⁶ Cf. Hattori, *op. cit.*, pp. 67 ff.; Amanuma, *Shiyō*, p. 250; *Zūroku*, Kamakura vol. i, pp. 2-71; related texts collected in *Kōji-ruien*, iii, pp. 600 ff. The Rengeōin main hall—then called the “august hall of the thousand images of the Thousand-armed Kannon”—was first dedicated in 1164, by the Retired Emperor Go-shirakawa. A great fire broke out in Kyōto in 1249; according to the *Godaiteiō-monogatari* 五代帝王物語 (annals from Go-horikawa through Kameyama, 1221-73), more than half of the capital was destroyed; “sparks flying through the air caught on the Rengeōin pagoda, which in its burning set fire to the august hall also . . . the main icon was carried out, but of the thousand images of August Buddhas, barely 200 odd were removed . . .” (*Kōji-ruien*, p. 602). The *Okanoya-kambakki* 岡屋關白記 (*ibid.*, p. 603; diary of Fujiwara no Kanekiyō 兼經 covering this period), records that in 1251/8/10, the ridge-pole of the Rengeōin was raised, the Retired Emperor Go-saga being at the ceremony. This re-erection was completed in 1266. The front porch was added at the beginning of the 17th century, in a period of restoration initiated by Hideyoshi.

⁴⁵⁷ Cf. comparative tables of *kibana* forms in Amanuma, *Shiyō*, pl. 107, and Kawakatsu, *Kokenchikun-yūmon*, fig. 33; also Liao and Chin examples in the Ta-t'ung monograph, *Bull.* iv/3, 4, figs. 186-7.

⁴⁵⁸ Cited by Kawakatsu, *op. cit.*, p. 68, as a Kamakura example, to me unknown.

recalling those of the Saimyōji *tabasami*; or in simpler terms, the silhouette of such a combination, with an elaborately moulded and bevelled edge, but no more surface decoration than a single incised scroll. This, the stage of Kanshinji in the fourteenth century (fig. 177), closely recalls the decorative beam heads used in contemporary Zen architecture. While the *Tenjikyō* type moves in succeeding centuries toward a zoomorphic realism, this remains floral or abstract in design.

COLUMN BASES AND PLATFORMS:

Except in buildings reconstructed in close imitation of Nara period predecessors, platforms, interior floors, and stairs are of wood. Railings may or may not be provided. The few surviving examples of the latter, on pagodas where they are protected to some extent by the roof overhang, combine with the evidence of Kamakura picture-scrolls to prove the continuation of the Heian type, perhaps with some increase in the upward flare of the rails beyond the corners.

Column bases, usually concealed by the wood verandah, are even when exposed of primitive form, often merely a natural stone flattened on the top. Eventually the base typical of the *Karayō* is borrowed, being used particularly under porch posts, as in the main hall of Kanshinji.

DOORS AND WINDOWS: TRANSOMS:

The Kamakura "Japanese" style made no innovations of importance in the forms of the traditional doors and windows. Both may be seen in the Sanjusangendō at a high point of excellence. The doors are set in a deeply moulded frame under the column-enclosing beam as a lintel. The outer corners of each valve are sheathed in a pierced bronze triangle; both pivot and socket are bronze-cased. The nail-heads are now very small, and set in widely separated tiers. In the windows, the lattice bars are set very close together, with an effect quite different from the wide spacing of the Hōryūji cloisters.

The developed esoteric hall plan of Kamakura, divided sharply by a partition into private and public areas, is frequently emphasized by the door design of its exterior. The secret half may be entirely closed, except for latticed windows, on the end walls, opening only in the rear. In contrast—as at Saimyōji (fig. 77)—the entire facade, leading into the *raidō* may be opened in grilled shutters, the ends of the *raidō* in such cases being provided with hinged board doors. This curious combination of shutters across the front and hinged doors at either end around the corner was undoubtedly adapted to the esoteric temple plan after previous successful use in residential architecture; picture-scrolls illustrated in the twelfth century show the same arrangement in the Imperial Palace (fig. 99).⁴⁴⁹

The partition between *naijin* and *raidō* is usually opened by sliding grilled panels. As a transom above these, running up to the ceiling or interior entablature, is a lattice, or *ramma* 欄間, typically designed in a diamond pattern. A frequently used elaboration is the use of paired diagonal strips, closed together and contrasting to the wider interval between pairs.⁴⁵⁰ Such a design, termed *fukiyose* 吹寄 or "drifted together," is seen in standard form in the Shōryōin of Hōryūji (fig. 186). In shrine architecture, and probably

⁴⁴⁹ Cf. Kawakatsu, *op. cit.*, fig. 75 and p. 117.

in that of palaces, the *ramma* from the fourteenth century on began to assume a pictorial quality comparable to that of the *kaerumata*. The change is not reflected in temple building until Momoyama and Edo, however, and so will not be discussed here.

ROOFS AND THEIR ORNAMENTS:

Wayō halls and pagodas may be covered either with tile or cypress shingle roofs, constructed of course in a well-matured version of the Japanese double shell. Since almost all cross-sections which I have seen include the later invented *hanegi* lever, the great majority must have been reconstructed during the Edo period or even later. It is thus difficult to know either their original framing method or their original slope, which the introduction of *hanegi* may have increased.

All remaining temple roofs are of normal form. In the picture-scroll *Ippen-shōnin-eden*, however, a work of the end of the thirteenth century so realistic in manner that its evidence can be accepted with nearly complete confidence, an unusual type is illustrated (fig. 185). The temple is Zenkōji 善光寺 in Shinano Province.⁴⁶⁰ Its "golden" hall, recorded as having been built at the order of Minamoto no Yoritomo at the end of the 12th century and repaired in 1253, burned in 1268 and built again in 1270, is shown with a hip-and-gable roof, intersected at the center by a minor transverse ridge, whose front and rear gables give the effect of dormers. Temple roofs of such a form are not found among existing monuments until much later. The idea must have been taken from shrine architecture, where it seems to have been less uncommon.⁴⁶¹

Among tile ridge acroteria of monumental type, the demon face *onikawara* seems to have been most popular.⁴⁶² The few datable examples show a well-defined advance in technical ability and particularly in plasticity. Those of the Tōindō of Yakushiji, of 1285, are somewhat more prominently moulded than Heian versions, with a beginning of the horns which in later centuries will become a prominent feature. On the south gate of Futaiji, around 1315, and on the main hall of Dōjōji, where the tiles are dated 1378, three-

⁴⁶⁰ Related texts in *Kōji-ruien*, iv, pp. 692 ff. In the case of Zenkōji, the claim to a 7th century foundation is partially substantiated by an entry in the *Fusō-ryakki*, iii, for the 13th of Emperor Kimmei (551). At that time the king of Pekche is said to have presented an Amida Trinity to the Japanese court; the *Fusō-ryakki* quotes "a certain record" 或記 to the effect that the Amida of Zenkōji was the same Buddha. Several sources explain how the image was taken to Shinano, by petition of a pious resident, in the reign of Empress Suikō, to be enshrined in his own house. The accounts differ in details to a suspicious degree; but there may well be a further confirmation of the tradition in the fact that the 13th century monastery shown in the *Ippen-shōnin-eden* has the single, axial pagoda layout of Tennōji, as if its re-erection had followed the lines of a 7th century original. A total conflagration of 1180 is mentioned in the history of the wars between the Taira and Minamoto, *Gempei-seisuiiki* 源平盛衰記, ix; while the *Azuma-kagami* records a restoration under way in 1187 (vii), dedication of its 5-storeyed pagoda in 1237 (xxx), a general dedication in 1245 (xxxvii), and restorations in 1253 (xliii). Beyond these, the historical gazetteer, *Shimbu-tōki* 信府統記 (by Mizuno Tadatsune 水野忠恒, preface 1724) states that there was a fire, from which not one building escaped, in 1268, and a re-erection dedicated in 1270 (*Kōji-ruien*, p. 697).

⁴⁶¹ E. g., the view of the quadruple shrine complex of Kasuga type given in the *Nenjū-gyōgi*, xii (*N-emak-shūsei*, xiii, 51).

⁴⁶² Cf. Amanuma, *Shiyō*, pp. 310 ff., for more detailed discussion of Kamakura roof-tile forms; also *Zūroku*, Kamakura vol. ii, pp. 380-91 (of which Dōjōji is 386-9, and Futaiji 384-5).

dimensionality and boldness of modelling have increased to a high point of effectiveness. In these last two versions, the original horseshoe shape of the whole acroterion has changed to a rounded trapezium, the flattened top being typical of later progress. A minority of tiles of the same general shape use either lotus or lion face motives.

Less monumental design may take the form of the so-called *shishiguchi* 獅子口. This in origin seems to have been a combination of simple tile elements. Shown frequently on palace roofs in the early fourteenth century picture-scroll *Kasuga-gongen-reikenki*, it apparently consists of three forms. The end of the roof is covered by three layers of flat tiles, slanting up to meet at the center, with their outsides covered by a vertical flat tile marked with a triple circle pattern. On top are set three round tiles, whose ends flare upward slightly. As seen in actual use on the altar shrine inside the Shōryōin of Hōryūji, the combination has become a purely decorative one. The flat tiles are united in a single block, the front of which is marked with a chevron pattern recalling the tile divisions; the three tile heads are marked with the pattern of three whirling commas popular in Kamakura, and a fourth circle with commas in the middle of the block.

On eaves tile heads, the most popular motives are the whirling commas (valued for their efficacy in averting evil); ornamental Chinese characters, giving the name of temple or building in full or in part; ornamental Sanskrit letters of esoteric significance; and various lotus motives, sometimes combined with a central phoenix. The traditional full lotus blossom design becomes less prevalent, and often is invaded by writing. Segmental tile-heads show a number of rather primitive patterns, a diagonal criss-cross, slanting crosses, commas set out in line, etc. In general, Kamakura is the last period in which tiles of good design and execution may be expected.

An ornamental roof form, known in the twelfth century, which advanced to popularity in Kamakura is the so-called *karahafu* 唐破風 or "Chinese gable," shaped like a very flat arch with widely elongated ends. The early history of the form is not clear. The continental origin implied in its name is borne out by the occasional appearance in Chinese paintings of what is obviously the same sort of roof, slightly altered in proportions from its Japanese version.⁴⁶³ Such pictorial evidence indicates that in China it was used always as a gable seen head on. Its earliest appearances in Japan, as illustrated in picture-scrolls from the mid twelfth century on, is a gable running lengthwise over a simple, two-post form of gateway (fig. 189). This may be shingled, or covered with flat boards only, or with boards on which earth has been heaped. The last technique, furnishing the generic name *agetsuchimon* 上土門, suggests one source for the whole outline, since earth piled over the top of a very flat plank gable requires board copings at each end of a roughly arched form. Such a source seems entirely Japanese. It seems to me, on the other hand, that there may be a basic difference in design between such a structural gable, used longitudinally, and a purely ornamental form used head on. Thus it is possible that the original rough *agetsuchimon* was later supplemented, and refined, by the decorative

⁴⁶³ Chinese prototypes of the *karahafu* are suggested by, e.g., *Ku Kung Shu Hua Chi*, xv (Yüan), which also shows *Tenjikuyō* bracketing details. Early Japanese versions appear in the 12th century *Nenjū-gyōji* (*N-emakimono-shūsei*, xii, p. 49), and the 13th century *Kitano-tenjin-engi* 北野天人縁起 (*do.*, xx, p. 15), and *Saigyō-monogatari* 西行物語 (*do.*, xi, p. 64), etc.

karahafu imported from China (where the latter must have had a quite different origin). The fully matured gable, set head on in Chinese fashion, appears at the middle of the thirteenth century on the altar shrine of the Hōryūji Shōryōin, with a cypress-shingled roof (fig. 187). The long outline, rising at first almost imperceptibly and then swelling up to the apex, is one of great sophistication and beauty. The *shishiguchi* acroterion described above rests on top; the bargeboards are delicately cusped, and at three points the purlin-heads are hidden by flat "hanging fish," of a type to be discussed in the next section. A less elegant version, shorter and somewhat more abrupt in its arching, covers the fourteenth century holy water stoup of Bujōji, north of Kyōto.⁴⁶⁴ From Muromachi on, examples remain of the *karahafu* in use as an entrance motif, in the transverse sense. The loss of beauty already perceptible at Bujōji continues progressively, the whole gable becoming shorter and the arch steeper.

BEAMS AND INTER-BEAM SUPPORTS; THE GABLE FIELD:

The *Wayō* beam proper carries on Heian tradition with a further loss of the vitality of Nara; the timber being almost entirely horizontal, with only rounded-off shoulders and a slightly hollowed-out underedge to recall its original arch. As early as the mid thirteenth century, the Sanjusangendō shows an introduction of *Tenjikuyō* detail, the ends of the aisle beams projecting through the columns as *Kibana*, and being cut off in a series of "Indian" style mouldings.⁴⁶⁵ The same hall illustrates the functional degeneration of the visible "rainbow" beam in two ways. The aisle is crossed at every bay by two tiers of stout beams, the lower of which supports the upper by a heavy solid *ita-kaerumata*; the upper, however, supports nothing, and apart from its bracing value the combination seems designed for mere visual effectiveness. The middle of the chancel, above the main icon, is crossed by very heavy girders; the cross-section indicates that these actually support only a panelled ceiling, the weight of the roof being taken and discharged on the columns by invisible timbers above them. This may, of course, be the result of a later reframing.

By late Kamakura the native "rainbow" beam tradition has been invaded by the Sung technique imported with Zen. Two features of the *Karayō* beam are commonly imitated: a very thin sinkage, the *mayu* or "eyebrow," outlining the hollowed-out underside; and a diagonal across each shoulder, the *sodegiri*, which marks a slight change of surface plane. These are well illustrated, for example, in the fourteenth century main halls of Futaiji (fig. 183), Ishideji, and Taizanji in Shikoku;⁴⁶⁶ the last carries its eclecticism to the point of terminating such a *Karayō* beam type, on the other side of the column, in *Tenjikuyō* mouldings.

The same Futaiji hall illustrates a detail of placing rare in its period but increasingly common later: the use of the "rainbow" beam on the exterior in place of the column-piercing beam. Here the innovation is confined to the axial bay; in the Edo period it is continued all around the building.

⁴⁶⁴ Cf. Amanuma, *Shiyō*, pp. 255-8; *Zūroku*, Kamakura vol. i, p. 135.

⁴⁶⁵ *Ibid.*, pp. 34 (aisle), 38 (*kibana*), 59 (chancel).

⁴⁶⁶ *Ishideji: ibid.*, pp. 424-7; *Taizanji*, pp. 400-07.

The traditional inter-beam support, the solid *kaerumata*, continues through Kamakura. The standard version of the Sanjusangendō is close to Heian precedent, but somewhat higher, with a thickness now only about one-third its height; a marked change from the proportions of Nara. In another class the form has become as abnormally low. In the fourteenth century gateway, Rōmon, of Hannyaji in Nara,⁴⁶⁷ the bearing-block almost rests on the beam below, the *kaerumata* proper having shrunk to a vestigial flourish on either side. Both designs are symptomatic of a functional degeneration which is actually justified, since hidden construction above has deprived the whole beam and *kaerumata* system of most of its original purpose. In the Haiden of the sub-shrine inside the Isonokamijingu, as already mentioned, the *kaerumata* used on the beam, ostensibly to support a ridge-pole, is a cut-out form of the greatest delicacy, incapable of performing any structural service (fig. 178).

In late Kamakura, again, the *kaerumata* may be supplanted by one of the two forms of inter-beam post brought to Japan with the new styles. The *Tenjikuyō* type, in which the round post or *enzuka* rests on the beam without any form of decoration, appears in the main hall of Futaiji, supporting the center of the chancel ceiling (fig. 183). The *Karayō* type, or *taiheizuka*, in which the post overlaps the beam in a long pointed termination, is used in the main hall of Ishideji.⁴⁶⁸ The final development in elaboration is the *oigata-notsuka* 笈形束 a form achieved by combining the post with a cut-out *kaerumata* leg on each side. The use of such a design in wood is foreshadowed by the paintings of the Hokuendō of Kōfukuji, cited earlier. At its most original and striking stage, this is exemplified by the inter-beam support at the center of the Futaiji south gate; the outline of the legs full of a stiff elegance, a florid moulded cresting along the sides of the post and the top of the beam, and the bracket above two-headed, with floral arm ends (fig. 182). Sophisticated and charming as it is, the whole form denotes a style already declining into the mannerisms of old age, eclectic and ingenious in detail rather than original. In later versions, the charm also disappears; at its low point, in the gable of the early seventeenth century Yokawa-chūdō on Hieizan, the *oigata* has declined to a well nigh incredible barbarity.

Gable fields in even the largest *Wayō* halls, like Saimyōji, may be filled with the simple traditional framing of king-post and slanting braces, now usually ornamental though their appearance is still functional. Others of greater modernity use an exposed beam and post combination derived from Chinese sources. In the south gable of the *raidō* of the Hokkedō, this is of *Tenjikuyō* type like many of the forms used on the interior. In the main hall of Murōji the details are those of the *Karayō*. The round king-post overlaps the beam; just beneath its capital, it is pierced by a purely ornamental arm with moulded ends. Such arms go back in Chinese architecture at least as far as the late tenth century Kuan-yin-ko of Tu-lo-ssū, where they are used in inter-columnar bracketing. Combined with the king-post, they appear in the Chin monuments of Ta-t'ung⁴⁶⁹ (although there

⁴⁶⁷ A Nara period foundation, destroyed in the general conflagration of 1180, and again at the mid 13th; the gateway was set up again at the end of the century, in the subsequent restoration; everything but it and the *sūtra* repository was burned down in 1490, and the latter also went in the fire started by the troops of Lord Matsunaga in 1567 (which consumed the Daibutsuden).

⁴⁶⁸ Cf. *Bull.* iii/2, p. 69 (Kuan-yin-ko; the illustrations are too poor to show the detail, the Chinese name of which is the "wing-shaped bracket arm" 翼形栱); iv/3, 4, pls. 19, 39 (Ta-t'ung halls).

they are set in the capital, rather than inserted through the body of the post; the latter feature recalls *Tenjikuyō* habits, as do its mouldings in the Murōji gable). In large fields, like that of the Ōnomichi Jōdōji main hall, the system may be expanded to two tiers of beams, separated by posts.⁴⁶⁸ Amplifications and elaborations of this last formula are typical of monumental architecture in later centuries.

Gable barge-boards may now terminate in *Karayō* or *Tenjikuyō* mouldings. As to the "hanging fish," or *gegyo*, the lack of any earlier examples (and the rarity even of those of Kamakura) makes it difficult to determine whether or not native tradition was much altered by foreign innovations. The thirteenth century *gegyo* of the Tōji Rengemon gate (fig. 67), which I have suggested may recall the shape of its early ninth century predecessor, is very different from the Kamakura standard seen elsewhere. Generally similar forms seem to have been sometimes used in Kamakura; those preserved from the fourteenth century Bujōji are even simpler than Tōji's, lacking any suggestion of a fish-tail separation at the ends, and simply descending in a series of scallops to a point at the bottom. These may be a provincial simplification of existing fashions, or a hold-over from earlier ones. The normal design is like a conventionalized spade with scalloped edges, curling up at either top corner; three trefoil or bifoil holes are spotted effectively against the board surface. The type is qualified by the name *inome* 猪目, from its fancied resemblance to a wild boar's eye. It is clearly related to, but simpler than, the Sung *gegyo* seen in such Zen buildings as the Kaisandō of Eihōji, or illustrated in the *Ying Tsao Fa Shih*; those being composed of two or three such "spade" forms, sometimes with a palmette surface treatment. One drawing in the *Fa Shih* is very like the Kamakura standard, and must indicate the latter's Chinese source; whether by importation with the *Tenjikuyō* (none of whose buildings retains its original *gegyo*) or earlier. Through the influence of the Zen style, the feature is occasionally supplemented by appendages or "fins," *hire*, running for some distance down the barge-boards on either side. Usually these are floral, as at Eihōji within the Zen style proper (fig. 131). Those belonging to the altar shrine inside the main hall of Bujōji have something of the character of *kaerumata* feet.⁴⁷⁰

CEILINGS:

The typical *Wayō* ceiling continues the *kogumigo-tenjō* formula already worked out in late Heian, a combination of large panels and a very small reticulation. The design may contrast aisle and chancel by raising the latter's ceiling on a cove; or both areas may be coved. In the Toindō of Yakushiji, for example, the lesser reticulation is delicate in scale, its strips fined down to an excessive thinness. Here there is no cove, but the same general effect is given by a frieze below the ceiling, with panels containing a minute vertical lattice. In the Hōryūji Shōryōin both cove and frieze are used, the latticing being horizontal (fig. 186). In such interiors the cabinet-maker's refinement of the ceiling is the most important factor in the appearance of the whole room. To harmonize with it, all possible large-scale elements—above all bracketing—are omitted or concealed. As in the main hall

⁴⁶⁸ Amanuma, *Zūroku*, Kamakura vol. i, p. 380.

⁴⁷⁰ *Bujōji Hondō*: Kawakatsu, *Kokenchiku-nyūmon*, fig. 65 and pp. 101 ff. *Kaisandō*; *Zūroku*, Kamakura vol. ii, pp. 66-7. *Bujōji shrine*: Kawakatsu, fig. 63.

of Murōji, an essential incongruity usually remains between interior and exterior, the latter being still heavy and comparatively bold in its details. Perhaps the large-and-small-coffered ceiling was a form originated in the palace of late Heian; certainly its character is better suited to the intimate scale of Japanese domestic architecture than to a temple's monumentality.

In halls of a resolute simplicity, like Kongōrinji, the ceilings are of planking, subdivided only by parallel strips.

ALTAR PLATFORMS AND RAILINGS: ALTAR SHRINES:

Particularly in the thirteenth century, the Heian altar platform type is repeated with changes only in details. That of the main hall of Jōmyōji combines the precedents of Hōkaiji and the Konjikidō. The dado *kozama* panels contain affronted peacocks, hammered out in repoussée; as in the Konjikidō again, the base moulding is enriched by lotus petals. The corners terminate in newel posts like those of the Hōkaiji stair, and Heian luxuriousness is carried on in gold-bronze fittings and mother-of-pearl inlay.⁴⁷¹ In the Koyasan Fudōdō of Kongōbuji, the formula is advanced by the use of a new shape of *kozama*, no longer composed of simple curves but foliated on top and rising in a floral finial from the bottom, like the contemporary *kaerumata* interior. For this innovation, varied continental parallels prove a Chinese source.⁴⁷²

Several altars make use of a different railing design in which the platform is left open at the center. The stop on each side is effected by the top rail, which sweeps down to the sill and then curls back on itself. The same method is standard in the Zen style; since its earliest Japanese versions probably predate the definitive introduction of the *Karayō* proper, it must have been first brought across by some earlier and less well understood current. In the Taimadera Mandaradō, the idea is combined with a platform and (restored) newel posts of conventional Heian type, with gilded and mother-of-pearl decorations. In the main hall of Gokurakuin in Nara,⁴⁷³ the proportions are radically altered, the platform being high with very large *kozama*, the railing squat and without any middle horizontal or newel posts, and the top rail ending like a *kaerumata* foot; all these join to make a design of unusual freshness and seeming originality.

Both in newel posts and *kozama* Kamakura taste is shown in minor changes. The neck of the former has been heightened, producing at the same time a marked shoulder. The latter, occurring in every sort of proportion, has in general a hardly perceptible stiffness of outline in comparison to the fluency of Heian, a first sign of the degeneration which from Muromachi on will become rapid.

A different Kamakura platform type is illustrated by that of the main hall of Kongōrinji. There is no railing, the altar being set between chancel columns. There are three tiers above a moulded base. The bottom contains *kozama* holding each a lion in relief; the next a rectangular panel with vertical latticing; and the top, set back a few inches from the rest, is embellished by a frieze of metal plates, a triple-comma medallion on the axis of every panel bay interrupting a series of "sword-point" strips the whole

⁴⁷¹ Kawakatsu, fig. 87, p. 133.

⁴⁷² A quondam sub-precinct of Gangōji; the Hondō datable by style only. *Zūroku*, Kamakura vol. i, pp. 166-9.

crowned by a row of small bosses (fig. 188). Tradition continues in the use of finely chased metal fittings for the lower two tiers. Superposition seems to have been a feature of altar design at this period. The Kamakura ritual altar of Shinyakushiji is composed of three tiers of *kozama* panels, separated by horizontals with bosses; the elements of Kongōrinji are used in reverse order on the thirteenth century altar at the rear of the Tōdaiji Hokkedō, with the frieze of "sword-points" along the bottom. Other variations are too numerous for individual mention.

In a number of buildings still predominantly *Wayō*, finally, like the Tahōtō of Chōhōji, strong *Karayō* influence has led to the adoption of precisely the same altar type which is most characteristic of Zen, and which must reflect the orthodox practise of Southern Sung.⁴⁷³

Architectural methods of enclosing the altar images for purposes of secrecy are of two types. In one, a small room or series of rooms is created at the rear of the chancel, with board doors opening onto the platform in front. In so elaborate a version as that of the Shōryōin of Hōryūji, this is emphasized by a small, shallow roof overhanging the doors, and rising in the middle to form the celebrated *karahafu* gable described in the previous section (fig. 187). The other method is to enclose the object of worship in a miniature, free-standing architectural shrine, which stands on the platform floor. Most of such shrines in existence today are of Muromachi or later date. One of the earliest, believed by Dr. Amanuma to be of Kamakura make, is a small Tahōtō model in the main hall of Shōkaiji 性海寺, scrupulously authentic in every detail;⁴⁷⁴ and (significantly) lacking any square *mokoshi* enclosure around the bottom.

DECORATION:

Enough evidence remains to show that the interiors of a large number at least of Kamakura temple buildings must have received an elaborate painted decoration, stemming in type from that of the Hōōdō. Traces of rich painted ornament remain in the Sanjusangendō; the colors and designs have been best preserved in a number of pagodas, perhaps because these were seldom opened. The highest quality is represented by the pagodas of Ishiyamadera (the Tahōtō), Kaijusenji, and Kōfukuji (three-storeyed).⁴⁷⁵ Patterns used in corresponding positions are often only modifications of those of the Hōōdō. The comparison is not to the advantage of the later work. The door-posts of the Hōōdō, for example, are painted in a pattern of repeating medallions, one above the other, held in a central area alternately swelling out and contracting in wave-like rhythm. At Kaijusenji the same design has hardened into a geometrical diamond criss-cross. Whether by coincidence or common origin, the pattern on the sides of the Kaijusenji lintel beams recall those of the girders in the upper floor of the Ju-lai-tien 如來殿 of Chih-hua-ssū in Peking,⁴⁷⁶ from the middle of the fifteenth century, and even more those carved on an architectural stele of 1568 in Ts'ung-hsiao-ssū 崇效寺 in Peking. The treatment seems to be lacking in the Hōōdō, and thus may represent one side of thirteenth century Southern Sung influence.

⁴⁷³ *Ibid.*, pp. 348-53. According to temple tradition, the Tahōtō was rebuilt in 1311.

⁴⁷⁴ For the accompanying altar platform and rail, see *ibid.*, pp. 430-4.

⁴⁷⁵ *Ishiyamadera: ibid.*, pp. 266-7; *Kaijusenji*, Hattori, *op. cit.*, pl. 9; *Kōfukuji, ibid.*, pls. 11-2.

⁴⁷⁶ Chih-hua-ssū: *Bull.* iii/3, fig. 58.

CHAPTER IV: THE MUROMACHI, MOMOYAMA, AND EDO PERIODS

IMPORTANT OR TYPICAL LATER REMAINS

It should be remembered that the lists below are concerned only with the formal Buddhist styles. Thus they do not include many other buildings erected for Buddhist use and aesthetically important, which by their comparative informality seem linked rather to contemporary domestic architecture. Celebrated examples of this excluded class are the "gold" and "silver" pavilions in Kyōto, built for the pleasure of the Ashikaga Shōguns. Shintō shrine buildings, and those belonging to the mausolea of the Tokugawa Shōguns in Nikkō and Tōkyō have naturally been omitted.

MUROMACHI PERIOD

THE "CHINESE STYLE":

- Anrakuji 安樂寺: Nagano-ken, Chiisagata-gun, Bessho-mura 別所村:
Pagoda, octagonal, four-storeyed
Fudōin: Hiroshima-ken, Aki-gun, Ushida-mura 牛田村:
Kondō
Shuonan: Kyōto-fu, Tsuzuki-gun, Tanabe-machi 田邊町:
Main hall
Tōzenji 東禪寺: Ehime-ken, Ochi-gun, Hiyoshi-mura 日吉村:
Yakushidō

THE "JAPANESE" AND THE "MIXED" STYLES:

- Daidempōin 大傳法院: Wakayama-ken, Nachi-gun, Negoro-mura 根來村:
Tahōtō
Enyūji 圓融寺: Tōkyō, Meguro-ku, Hibusuma-machi 碑衾町:
Main hall
Fudōji 不動寺: Shiga-ken, Kurita-gun, Shimodakami-mura 下田上村:
Main hall
Hōryūji:
Great south gate
Jōdōji: (in Hyōgo-ken):
Main hall
Kimbusenji 金峰山寺: Nara-ken, Yoshino-gun, Yoshino-mura 吉野村:
Main hall.
Myōōin 明王院: Hiroshima-ken, Numakuma-gun, Kusado-mura 草戸村:
Main hall
Tōfukuji 東福寺: Kyōto, Higashiyama-ku, Hommachi 本町:
"Triple" gate, Sammon

MOMOYAMA AND EDO PERIODS

THE SOUTH CHINESE STYLE OF MING-CH'ING:

Fukusaiji 福濟寺: Nagasaki, Chikugo-chō 下筑後町:

Fore-hall
Main hall
Middle gate

Sōfukuji 崇福寺: Nagasaki, Imakago-chō 今籠町:

Main hall
Hall of Protecting the Law, Gohōdo 護法寺:
Gate of the First Summit, Daiichibumon 第一峯門

Mampukuji 萬福寺: Kyōto-fu, Uji-gun, Uji-machi (partly *Karayō* proper):

Triple gate
"Heavenly Kings' hall," Tennōden 天王殿
Buddha hall
Dharma hall, Hōdō

THE "CHINESE STYLE" OF SUNG-YÜAN; *Karayō*:

Daitokuji 大徳寺: Kyōto, Jōkyō-ku, Murano-daitokuji-machi:

"Triple" gate
Buddha hall
Dharma hall

(These three are included not because of their intrinsic importance, but because they show the late Zen standard in monumental buildings. Their types are followed with close similarity at Myōshinji, Nanzenji, and Shōko-kuji in Kyōto as well as Zuiryūji in Takaoka; while the "triple" gate form is used, outside of the Zen sect, by the Chionin, listed below)

THE "JAPANESE" AND "MIXED" STYLES:

Chionin 智恩院: Kyōto, Higashiyama-ku, Ringe-chō 林下町:

Founder's hall

Chōmeiji: Shiga-ken, Gamō-gun, Shima-mura 島村:

Main hall

Daigoji:

"Hall of the Five Great Ones," Godaidō 五大堂 (recently destroyed)

Daitokuji:

"Chinese gate," Karamon 唐門

(included as being more or less standard for elaborate single-storeyed gateways of the Karamon type)

Enryakuji:

Main hall, Komponchūdō
Lecture hall, Daikōdō

- Hompa-honganji 本派本願寺: Kyōto, Gekyō-ku, Horikawa-dori 堀川通:
 Amidadō
 Founder's hall, Goeidō 御影堂:
 Kiyomizudera 清水寺: Kyōto, Higashiyama-ku, Kiyomizusaka 清水阪:
 Main hall
 Kongōbuji:
 Yakushidō
 Onjōji: Shiga-ken, Ōtsu-shi, Besshō-machi 別所町
 Kondō
 Tōdaiji:
 Great Buddha hall, Daibutsuden
 Tōji:
 Kondō
 Pagoda, five-storeyed
 Zuiganji 瑞巖寺: Miyagi-ken, Miyagi-gun, Matsushima-machi 松島町:
 Main hall

A detailed account of Japanese temple architecture between the fifteenth and nineteenth centuries would expand this study to impossible dimensions. Discussion of the work of these four centuries is thus abridged to the bare essentials necessary for a general understanding. From the standpoint of a broad evolution of architectural style, such abbreviation is not unjustified. Temple building from Muromachi on presents almost no new phenomena. Its forms, for all their wide variety, represent merely the development to extremes of tendencies already observable in Kamakura. A summary of achievement in late Japanese Buddhist architecture may be based on the two most important of these trends: an advance in the plan design of the icon hall to accommodate the greatly increased lay congregations of the popular Buddhist sects; and a progress toward the sculptural enrichment of almost all architectural details. Both processes reached their climax in early Edo. The strength of the style thus crystallized admitted no modifications of any real significance; the record of the last two centuries, therefore, is one of uninspired repetition, a tedious search for further elaboration, and decadence of taste.

GENERAL TEMPLE PLAN

The Buddhist establishments of recent centuries in Japan—in most cases no longer to be called monasteries, since the few priests in charge of each are usually married—follow normally no fixed principles of arrangement. Some present an axial layout holding together at least the entrance gateway and the main hall; others are completely irregular, with buildings adjusted merely to varying conditions of terrain. No more than a majority are oriented to the south. The conventional elements of the old Nara monastery are markedly simplified, to suit a religion now popular rather than monastic. There is no formal lecture hall, usually no pagoda, and often no *sūtra* repository; the temple bell, instead of being

enclosed in the upper storey of a pavilion, is hung low in an open shed, where every worshipper may sound it on his own behalf. In place of the symmetrical dormitory blocks of Nara and the isolated refectory, all living quarters are primarily domestic in design, and usually are separated into isolated dwellings, each with its own garden. Walls, gardens, buildings, or trees take the place of the old cloister corridors in delimiting the area normally open to public worship. In popular temples of any size, finally, a whole new class of erections—shelters, refreshment booths, offices for the sale of souvenirs and charms, etc.—ministers to the needs of worshippers, and to the profit of the temple treasury.

The one distinctive creation of late Japanese temple planning is the layout typical of the major establishments of the Shin sect,⁴⁷⁷ most popular of the subdivisions of the religion of Amida (figs. 191, 195). In these great pilgrimage centers, there are always two main buildings, side by side and connected by an open, roofed corridor: the Amidadō, devoted to worship of the Buddha, and the Goeidō, consecrated in memory of the founder of the sect, Shinran-shōnin 親鸞上人. The latter is always the larger and more impressive of the two, an apt commentary on religious evolution (fig. 198). As if to compensate the balance of reverence due, it is typically the simpler in construction, being one-storeyed and erected largely in the "Japanese" style, *Wayō*, while the Buddha hall is two-storeyed and on the exterior follows principally the more complicated "Chinese" style, *Karayō*. The entrance wall of the temple is pierced by two principal gateways, corresponding roughly to the positions of the main halls. Here that leading to the founder's hall is again much larger, and with its two storeys and tiled roof forms a third major element in the appearance of the temple. The Buddha hall gateway, single-storeyed and with a single opening instead of the other's three, is usually of the type called Karamon or "Chinese gate," with curving gables and a shingled roof. In all but two of such head temples, the halls and gateways of the Buddha and of the founder stand respectively on left and right as one enters. In the exceptions, the Western, "original" Hōmō-honganji⁴⁷⁸ and Kōshōji 興正寺⁴⁷⁹ in Kyōto, the arrangement is reversed.

⁴⁷⁷ Cf. Fujiwara, "Jōdō-shinshū no Jūn-kenchiku," in *Bukkyō-kokogaku-kōza*, ix, Jan. 1937.

⁴⁷⁸ Fujiwara, *op. cit.*, pp. 4-12 and illustrations; Ponsonby Fane, *Kyōto*, pp. 131, 279; related texts in *Kōji-ruien*, iii, pp. 419 ff. The temple was originally established at Ōtani 大谷 on the hillside east of Kyōto, in 1272, in connection with the burial place of the founder, Shinran. The jealousy of Enryakuji forced its destruction and the expulsion of the sect from Kyōto, in the 14th century; throughout the Muromachi period, Hōganji had several times to be transferred to entirely new locations in distant provinces, to avoid religious persecution or civil war. Finally in 1591 the favor of Hideyoshi granted it its present site at the southern end of Kyōto. The prestige and power of the sect headquarters rose so rapidly thereafter that Tokugawa Ieyasu thought it expedient as early as 1602 to divide it into two sections, and gave land to a newly created Eastern Hōganji.

It is recorded that in the original monastery of the Kamakura period at Ōtani the main hall, or Amidadō, was 3 *ken* 4 *men*, and the founder's hall, or Goeidō, was 5 *ken* 4 *men* (*Kōji-ruien*, p. 439, from the *Sōrinshū* 叢林集, vii, of the Shin priest Ekū 慧空, 1644-1721). At that stage, therefore, the general plan combination had already been established, but the smallness of the sect allowed it still to use buildings of conventional type. The founder's hall set up at Ōsaka in 1586 was 11 *ken* square, i. e. more nearly like the now existing hall (Ponsonby Fane, p. 130). After the sect had regained its foothold in Kyōto, this building was transferred to the present site in 1592. It collapsed in a great earthquake of 1597, but was promptly rebuilt. In 1607 it was repaired, and a new Amidadō was built. In 1617, almost the

The temple enclosure, among its monumental erections, always contains in addition a bell pavilion, which may be on right or left, or at the center of the front courtyard, between the axes of the gateways. A few Shin establishments possess also a *sūtra* repository, roughly balancing the bell in plan. One, Gōshōji 毫攝寺 in Mie-ken,⁴⁸⁰ has the Chinese feature of a drum tower instead. In no case is the general plan symmetrical, or any axis more than approximate.

Almost all Shin headquarters face east. The orientation is a natural result of the religion of Amida, who is thus found by the approaching worshipper in His proper place on the west. At least as early as the Heian period, Amida halls had occasionally followed this scripturally logical disposition; an actual example of the time remains in the Hōōdō at Uji, and texts show that the same orientation held in the earlier Hōjōji built by Michinaga.⁴⁸¹ To face an entire temple toward the east, however, is a peculiarity of the Shin sect, and apparently one of fairly recent date. Of the two Shin head temples whose buildings are earliest, one, Gōshōji, faces south. The other, Hōmpa-honganji, is known from textual evidence to have been rebuilt in 1618, at which time its previous orientation was altered and the east made the front.⁴⁷⁸ It is probable that later Shin establishments followed this precedent.

In large temples of the Jōdō sect, historically the parent of the Shin, the same two major halls are often found, with a similar contrast in size and appearance. Here there is no such unanimity of general plan, however; and while in such representative layouts as those of the Chionin⁴⁸² and Hyakumanben 百萬遍⁴⁸³ in Kyōto the Amida hall faces east,

entire temple was burned down. It was in reconstruction after the disaster that the orientation of the temple was changed from west facing to east. Rapid growth of the sect soon made even the expanded layout of 1618 too small. Between 1633 and 1636 a new founder's hall, the existing one, was erected. The old one was turned into the Amidadō, and the old Amidadō was made into reception rooms. In the mid 18th century the by then outmoded Amidadō was moved away to a subtemple, or Betsuin 別院, of the sect in the western hills. The hall which took its place, the present one, was dedicated in 1760 (Ponsonby Fane, pp. 133-4).

The unorthodox relationship at Hōmpa-honganji between the two major buildings may be easily explained. Presumably a long tradition had established the usage that Amidadō and Goeidō should stand to left and right respectively—their normal position elsewhere. When the orientation of the temple was reversed in 1618, however, we may imagine that each of the new buildings was merely turned around on its own site; so that from the new entrance on the east, their relationship was now right and left. Kōshōji probably followed the precedent literally, whereas the other Shin temples preferred the older tradition.

⁴⁷⁹ Fujiwara, *op. cit.*, pp. 15-7; collected texts in *Kōji-ruien*, iii, pp. 464 ff. First established by Shinran himself in 1212 in Yamashina, the smaller valley east of Kyōto. In its early centuries shared in most of the difficulties of the headquarters temple; the present site in southern Kyōto acquired in 1591. All existing buildings postdate a general fire of 1902.

⁴⁸⁰ Fujiwara, *op. cit.*, pp. 19-25; collected texts in *Kōji-ruien*, iv, pp. 116 ff. Founded in 1225 by Shinran; moved to its present site in the later 15th century. Thus it has existed on one site longer than any of the other great Shin temples, and still preserves the conventional southward orientation. Had it been moved to a new location in the Edo period, it would probably have imitated the new orientation toward the east.

⁴⁸¹ See above, p. 134.

⁴⁸² Collected texts in *Kōji-ruien*, iii, pp. 639 ff.; Ponsonby Fane, *Kyōto*, pp. 160 ff. Originally a subtemple of Tendai, it was adopted by the newly formed Jōdō sect under Hōnen-shōnin at the beginning of the 13th century, and became the latter's place of burial. The same sort of persecution from the monks

the founder's hall—dedicated in Jōdō to Hōnen-shōnin 然聖人—is placed on one side at its rear, fronting to the south.

Nichiren temples have usually a greater complication than those of the other two popular sects, reflecting a polytheism in strong contrast to the simplicity of the religion of Amida.⁴⁸⁴ There are again two principal halls, with the larger and more prominently placed dedicated to the founder, Nichiren-daibosatsu 日蓮大菩薩. The second may be a Hokkedō, enshrining the *Lotus Sūtra*, *Hokkekyō*, as the basis of Nichiren's teachings, or a Shakadō in honor of the Buddha to whom the *sūtra* is ascribed. Certain Nichiren plans, like that of Hokkekyōji 法華經寺 in Chiba-ken,⁴⁸⁵ are axial in their distribution of major buildings and gateways; in such cases the second hall stands behind the first. More often the layout, even though on level ground, has the looseness natural to an irregular terrain; here, as at Hommonji 本門寺 in Tōkyō,⁴⁸⁶ the two are placed side by side, with a bridge corridor between.

A pagoda is essential in every large establishment of the Nichiren sect, because of the emphasis given the feature both in the *Lotus Sūtra* and in Nichiren's writings. In esoteric Buddhism, the miraculous pagoda of the *sūtra* is represented by the Tahōtō form, through identity of name; Prabhūtaratna, the deity enshrined within, is the Buddha of Many Treasures, Tahō-butsu 多寶佛. In Nichiren practise, however, no such rule of iconography is followed, the form used being variously the conventional three or five-storeyed type, the Tahōtō, or even an imitation of the Tendai Sorintō.⁴⁸⁷ Because of its doctrinal importance, the pagoda is prominently placed in the fore-part of the main temple enclosure, in front of the founder's hall or close to the main gateway.

of Mt. Hiei at the outset as that which drove the Shin sect from the capital; in this case much more brief, so that the site of the Chionin has been occupied continuously since the 1230's (except for the decade after the burning of Kyōto in the Ōnin war of the late 1460's, when the temple was temporarily moved to Omi Province). Favored by all the great of Kyōto in turn, the Imperial House, the Ashikaga Shōguns, Nobunaga, Hideyoshi, and finally Ieyasu and Iemitsu. Ieyasu rebuilt the whole temple on a much enlarged scale at the outset of the 17th century. His son Hidetada erected the existing Sammon gateway in 1619. In 1633 most of the temple was burnt; reconstruction was undertaken at once by Iemitsu, and was completed in 8 years on the old model. The main hall, or founder's hall, the principal building, dates from this time; the Amida hall from the 19th century.

⁴⁸³ Collected texts in *Kōji-ruien*, iii, pp. 706 ff. Also called Chionji 知恩寺. The popular name, Hyakumanben, refers to an unprecedented Nembutsu 念佛, or invocation of Amida, performed in the 14th century to avert a plague; during which the Buddha's name was called upon one million times, with the aid of a gigantic rosary, still preserved. A former Tendai precinct, turned to Jōdō use by Hōnen-shōnin. Several times transferred to new sites in Kyōto, being established on its present location in 1662. Its main hall, dedicated to the founder, was erected in 1679 (*Kōji-ruien*, p. 710).

⁴⁸⁴ Cf. Fujishima, "Nichirensū-jūin no Kenchiku," in *Bukkyō-kokogaku-kōza*, xiv, Dec., 1937.

⁴⁸⁵ *Ibid.*, pp. 73 ff.; *Kōji-ruien*, iv, pp. 511 ff. Traditionally the place where Nichiren first began his preaching, at the mid 13th century. Present buildings date from the Edo period, except for the Hokkedō, which by its style seems to be of the later 15th.

⁴⁸⁶ *Ibid.*, pp. 66 ff. Existing buildings of the Edo period, the 5-storeyed pagoda early 17th, the rest after a fire of 1710.

⁴⁸⁷ Cf. Fukuyama, "Tendai Shingon," *Bukk-kokogaku-kōza*, iii, under Enryakuji. First set up on Mt. Hiei around 820; a sort of mast holding at the top nine tiers of small cylinders, each of which contained an esoteric spell. The present form, dating only from 1895, exists also in a copy at Nikkō, and is quite different from that described in Kamakura period records.

A Nichiren building of third rank in importance is usually the Sankōdō 三光堂, dedicated to the divinity Sankō-tenshi 三光天子 worshipped especially by the sect. In large establishments there are in addition bell and *sūtra* pavilions, and a number of buildings in honor of the deities named by the *Lotus Sūtra* as devoted to its protection: a Taishakudō 帝釋堂 for Taishakuten (Indra) and Bonten (Brahma), a Kishimojindō 鬼子母神堂 for the demon goddess Kishimojin (Hariti), etc. These typically surround the public area; and since the function of the gods they serve is analogous to that of the Japanese deities accepted (until the nineteenth century) as tutelary protectors of Buddhist precincts, their forms often follow those of Shintō shrines.

THE ICON HALL: PLAN AND CROSS-SECTION

Plan development of the icon hall from Muromachi to Edo was a feature primarily of the new sects of popular Buddhism which had risen to importance during Kamakura. The need which occasioned this final evolution was that of accommodating a greatly increased congregation, comprising all classes instead of the nobility alone. In a sense, this was no new problem, but rather an intensification of the necessity which had forced a drastic re-design of religious architecture during the Heian period. The solutions adopted by the popular sects, therefore, were not so much new creations as modifications of the plan formula already existing in Kamakura; just as the sects themselves were in doctrines not so much original as the adaptation and intensification of features already existing in Tendai.

The strongly marked plan types characteristic of Jōdō and Shin, and to a lesser extent of Nichiren, show clear traces of their derivation from the Kamakura standard. The source is the more natural since all three sects were founded by leaders who had been graduates of Tendai training on Hieizan. Change is noticeable in two important particulars. One is a radical alteration in the proportioning of space and function within the building. In early Buddhist halls of the type of Hōryūji and the Hokkedō, the entire interior had been designed for priestly use, without any provision for the lay worshipper. In the mature esoteric formula of Heian and Kamakura, the area available for the lay congregation had varied from one-third to one-half that of the entire building. In the Shin icon hall, standardized in early Edo as the climax of this gradual shifting of emphasis, the public area has advanced to two-thirds of the whole. The second change is an almost complete abandonment of the principle of secrecy essential to esoteric Buddhism. The main icons are still hidden within elaborate altar shrines; all important ritual worship, however, is performed within view of the congregation.

Of the two plan types of the Amida sects, that of Jōdō is the more closely linked to the past. The normal large-scale Jōdō icon hall is exemplified by three impressive monuments in Kyōto, of the seventeenth, eighteenth, and early twentieth centuries respectively, Hyakumanben (fig. 193), the Shakadō of Shōryōji 清涼寺,⁴⁸⁸ and the Eikandō 永觀堂

⁴⁸⁸ Collected texts in *Kōji-ruien*, iii, pp. 888 ff. First founded at the mid 9th century; most famous for the sandalwood image of Shaka, a Chinese copy of the original Udayana image, which was brought back from Sung to become its main icon in 987. Shōryōji proper dates from this time. Destruction by fire in 1190, and again in 1218; the re-erected Shakadō was dedicated in 1222. It must have been the hall of

(fig. 199).⁴⁸⁹ The building approaches a square in plan. All across the front runs a publicly used area two or three bays deep. Along each end a narrower area—also normally open to the lay congregation—runs back to stop against minor shrine alcoves, set inside the rear wall. These front and end spaces are separated from the rest by interior columns, with low barrier railings between, and are floored with *tatami* 畳 mats of straw, like any other rooms used for domestic or convivial purposes in Japan. The area inside columns and railings is used by the priests; because of its greater formality of function, it possesses a polished wooden flooring, small individual mats being set out as seats for those participating in the ceremonies. Well to the rear of the center is a space enclosed by four columns with a special entablature and ceiling. Most of this is occupied by a high image altar, upon which the principal icon is placed inside an elaborate gilded shrine in the form of a small temple building. Near the front pair of columns is a long table for offerings. Further in front on the main axis, at the approximate center of the hall, is the seat of the chief officiating priest, with low stands for *sūtra* scrolls, utensils and a sounding-plate at his front, left, and right respectively. At either side of him, spaced regularly to the front barrier railing, are the seats of the other priests, each with a low *sūtra* stand in front.

The most elaborate version of the Jōdō type is presented by the headquarters of the sect in Kyōto, the seventeenth century founder's hall of Chionin (fig. 192). Here the space across the front is three bays deep, approximately 33 feet. The end areas, losing all reminiscence of the traditional aisle, have become squares. The central area is T-shaped; with an extension, that is, on each end to include in the enclosure allotted to the clergy the floor space immediately in front of the minor rear altar alcoves. For ceremonies before the main altar, an open chancel floor almost 80 feet wide by 40 deep is available inside the barriers. Normally much of this is left vacant; but in the periodic observances attended by high priests of the sect from all over Japan, every available foot is utilized to seat the assembled clergy. One of the greatest assets of Jōdō as a prospering institution lies in the spectacular pomp of such gatherings; the great procession of priests from their living quarters to the hall, across a covered bridge at the rear; the expectant solemnity of preparation and place-taking; and then the service itself, with the glitter of lights on the gold of altar, tables, and hangings, the confused splendor of massed vestments, and the majesty of responses chanted by a hundred throats. All of this, seen at close hand from three sides by the crowding faithful, is like a dramatization of the unending chorus of praise in the Western Paradise, unearthly in its richness and beauty; and to such purposes of overwhelming theatrical display, Jōdō architecture is adapted with admirable effectiveness.

The Chionin represents a sophisticated refinement of the Jōdō plan principle, with a complication for ceremonial efficiency made possible by the great size of the building. The

this date which is shown in the picture-scroll *Yūzū-nembutsu-engi* of 1414 (see below, p. 281). The existing hall was rebuilt between 1693 and 1703. Originally established under Shingon auspices, but more and more influenced by Jōdō, until it was formally delivered to the latter sect in the early 18th century.

⁴⁸⁹ Formally styled Zenrinji 禪林寺; collected texts in *Kōji-ruien*, iii, pp. 677 ff. Established in the 9th century under the Shingon sect; its popular name comes from that of the leader of its Amidist revival, Eikan 永観, in the late 11th. Reached a point of great wealth and influence in Kamakura, after an initial enlargement by Minamoto no Yoritomo; later gradually declined, until it was destroyed in the Onin war of the mid 15th. The usual vicissitudes followed. The existing hall was re-erected between 1909 and 1912.

simpler standard followed in lesser halls must have been fixed well before the Edo period. A view of the early thirteenth century predecessor of the Shōryōji Shakadō appears in the picture-scroll *Yuzu-nembutsu-engi* 融通念佛縁起 of 1414⁴⁹⁰ and shows characteristic features of the type already in existence: the spacious area across the front, the altar shrine surrounded by four columns, and some kind of separate enclosure at the ends (fig. 190). It is noteworthy that at this stage the Jōdō interior might be still divided by grille-work, instead of the later orthodox railings; and that the picture shows the altar close to this barrier, suggesting that the extremely spacious chancel of the seventeenth century Chionin was a later development, made with an increased appreciation of the value of display. Essentials of the Jōdō plan appear even in purely esoteric buildings of Kamakura. For example, the main hall of Daihōonji in Kyōto,⁴⁹¹ dated 1223, possesses the same four-column altar enclosure, while its aisles running across front and ends are clearly the prototype of the Jōdō public areas. Here, by a persistence of conventional structural method and the tradition of the ambulatory, the aisles are the same width all around. In another Kamakura monument, however, the main hall of Shōshōin (fig. 163) in Wakayama,⁴⁹² the open front space is already half again as wide as the ends. The Jōdō standard followed to the twentieth century is merely a combination of the ideas expressed in these two Kamakura buildings, with slight modifications for ceremonial convenience.

It should be noticed that in all Jōdō halls the possibility of circumambulation is carefully maintained, since the ceremony of *pradakṣiṇa* about the image altar is an integral part of all worship of Amida. A rear passage thus always exists behind the altar wall; but no suggestion of the old ambulatory remains, both because this aisle is usually narrower than the other areas around the outside of the building, and because the rear corners are blocked by supplementary altar alcoves.

The Shin plan type, even more strictly observed than the Jōdō, is at the same time at a farther stage of evolution (fig. 191). Here the public area is a single great room across the front, covering an average of two-thirds the total depth. Treatment within this space is conditioned by its size; in a small building the room is entirely open, while in the largest of all Shin constructions, the founder's hall of the Eastern, Higashi-honganji in Kyōto,⁴⁹³ it is subdivided into five "naves" by transverse column lines. The innermost bay, running directly in front of the priest's area, is separated from the rest by a railing; this, called as in Tendai the *chūjin* in contrast to the *gaijin* in front, is reserved for the seats of the privileged.

The priests' area, occupying the rear third of the hall, is subdivided again according to available floor space. At the center is always a square room or *naijin* housing the main altar. On either side is a narrower room, the *yoma* 餘間, with supplementary altars at the rear and an open space for seating in front. Halls of great scale contain in addition rooms outside the *yoma*, called *wakima* 脇間, of equal size and similar function. The

⁴⁹⁰ Published in *N-emakimono-shūsei*, xxi.

⁴⁹¹ See above, p. 255 and note 442.

⁴⁹² See above, p. 251 and note 434.

⁴⁹³ Cf. Ponsonby Fane, *Kyōto*, pp. 291 ff.; Fujiwara, *op. cit.*, pp. 12-5; texts in *Kōji-ruien*, iii, pp. 451 ff. After a series of disastrous fires during the 19th century, the two major buildings were finally reerected between 1890 and 1895.

building is always surrounded on front and ends by a wide porch; this, to the rear of the line separating clergy from public, is enclosed, and according to its size becomes either one or two long narrow rooms, the inner the *ensho-no-ma* 縁廂の間 (corresponding to the space inside the porch pillars), and the outer the *saya-no-ma* 鞘の間 (corresponding to the space between pillars and railing). Inside the hall proper, the two primary areas are divided by a heavy bracketed entablature, sculptured transoms, and partitions which except during the ceremonies are kept entirely closed. In front of the *naijin* sanctuary are ornamental doors; in front of the flanking rooms—by the formula in use in the Kyōto headquarters—are sliding paper screens, gilded and painted like those typical of Japanese palaces. The various subdivisions are emphasized by differences of floor level, lowest in the *gaijin* and *chūjin* and highest in the sanctuary.

In comparison with the Jōdō standard, the Shin type is marked by a great increase in public space and an equally drastic shrinkage in ceremonial area. In the performance of great liturgies, all rooms at the rear are thrown open, both toward the front and into communication with each other, and may be filled with priests. Normally, however, only the central *naijin* is used; the room, no matter what its actual dimensions, always seems dwarfed and crowded in contrast to the great open area in front of it. Its interior arrangement shows a clear affinity with the Jōdō sanctuary. Small scale, however, permits only two columns, at the rear of the main altar, and fewer attendant priests. Shin ceremonial, marked by the opening of the *naijin* doors and the lighting of lamps, and viewed entirely from the front, is even more obviously theatrical than that of its rival; and being performed at a distance, behind the partial barrier of pillars, open doors, and elaborately sculptured transoms, retains a suggestion of esoteric mystery.

The Nichiren hall, less strictly regulated than those of the two Amida sects, follows usually a ground-plan similar to that of Jōdō, with public spaces in front and on either side of the chancel. In essentials the type shows little development beyond Kamakura, since the *gaijin* takes the form of an aisle the same width on front and ends. Ceremonial furniture is arranged in the chancel on a scheme broadly like that of Jōdō, to accommodate a large number of celebrating priests. The altar of the founder's hall has the image or picture of Nichiren in an architectural shrine at its center, with representations of the founder of the temple and of its great priests on either side. The Hokkedō usually enshrines a miniature Tahōtō as the symbol of the *Lotus Sūtra*. Occasionally, as at Honkokuji 本國寺 in Kyōto,⁴⁹⁴ the *sūtra* is represented instead by an arrangement of images recalling the scene of its preaching: the Buddhas Sakyamuni and Prabhūtaratna side by side, Bodhisattvas, monks, and Protectors of the Law. In such a case the large altar platform, crowded with statues, recalls the practise of earlier periods under the control of esoteric Buddhism.

A few phenomena of late hall planning in general should be noticed. The marked increase in the depth of the hall to provide a spacious chancel occasionally is carried well beyond the normal square plan. Buildings of this sort, appreciably deeper than they are long, could be roofed only with difficulty by the conventional form; the gable is therefore

⁴⁹⁴ Collected texts in *Kōji-ruien*, iii, pp. 473 ff.; Fujishima, *op. cit.*, pp. 87-90. Present buildings are all Edo.

set frankly on the front. In the eighteenth century founder's hall of the Shingon Kami-daigo, the effect is that of a hall with the entrance placed on the end rather than in front (fig. 197). In the very large nineteenth century founder's hall of the Nichiren Kuonji 久遠寺 in Yamanashi-ken,⁴⁹⁵ a similar plan proportion is used to produce a T-shaped roof design, the front half of the building covered by a hip-and-gable set head on, and the rear half by one running in the normal transverse sense.

A ground-plan used with some frequency during Edo is the so-called *Gongen-zukuri*, a three-part complex in which sanctuary and public areas, as separate blocks, are connected by a wide room-like corridor. We have seen one version of the plan used on a very large scale in the Nara period refectory of Tōdaiji, and another with much smaller dimensions in the standard Hachiman shrine.⁴⁹⁶ These designs, and the corridor linking hall and *raidō* in the Heian period, were probably the result of T'ang influence. A new Sung version of the idea may be seen in the Kaisandō of Eihōji, linked by similarity of form and proportions to later Chinese remains.⁴⁹⁷ The Kaisandō is commonly accepted as the ancestor of the *Gongen-zukuri*, and it may well be that the prestige of Zen use renewed the popularity of the plan. Its wide-spread use began in Momoyama in Shintō architecture, and was continued with even greater importance in Edo through its choice as the standard plan of the main hall in the Tokugawa Shōgun's mausoleum. In Buddhist architecture its adoption was comparatively infrequent, but it might be used whenever a high degree of privacy was required for the sanctuary. Typical late examples in Kyōto are the founder's hall of the Nichiren Honkokuji, and the Shingondō 眞言堂 of Kōryūji.

A general tendency marked in late Buddhist architecture is the abandonment of strict column axes. Often the columns enclosing the chancel do not line up with those on the exterior, while a third set of axes may be used by those which surround the altar. The design is clearly a product of convenience, and is made possible by the roof framing characteristic of mature Japanese building practise. In the strictly symmetrical beam system used by the Chinese, supports may be shifted with comparative freedom along the axes; any displacement to one side or another is rare, however, and entails a usually visible and awkward rearrangement of lower beams to regain the framing axis above. The invisible roof construction of the Japanese conceals all such difficulties of adjustment; if spatial requirements—or perhaps no more than a desire for picturesque variety—make it preferable to abandon a strict alignment, the results are hidden above the ceiling.

In the cross-section of the typical late icon hall, the rooms are closed in by flat coffered ceilings. Above run the main horizontal elements in the roof framing, a tier of large tree trunks—variously straight or curving—which serve as horizontal girders. Along these a series of comparatively small posts rise to support the roof (fig. 200). Where each post strikes the rafters, a horizontal runs across to the corresponding intersection on the other side of the roof. This serves merely as a brace, however, in contrast to the mounting beam tiers of Chinese practise, each holding the next by posts or *kaerumata*; the Japanese posts all stand on the main girders at the bottom of the system. The very wide eaves

⁴⁹⁵ Fujishima, *op. cit.*, pp. 56 ff.; texts in *Koji-ruien*, iv, pp. 248 ff.

⁴⁹⁶ See above, pp. 56, 78-9.

⁴⁹⁷ See above, pp. 180-1, 230-1.

overhang—sometimes almost as much as the height of columns and bracketing, and thus in striking contrast to the timid projections of the late Chinese style—is supported principally by one or two long *hanegi* on each framing axis, running from the eaves edge well into the interior, and balancing on the wall column as a fulcrum (fig. 201). At the corners of the roof the *hanegi* radiate like the rafters of the *Karayō* and *Tenjikyō*, to give effective diagonal support.

A marked characteristic of the late interior, emphasized by the general use of flat ceilings, is a sense of dominant horizontality. Even when the ceilings are fairly high, as in the Chionin or the Honganji halls, their actual dimensions are disguised by the overwhelming extension of the space in depth and to either side. This sense of lowness rules also on the exterior, where the great roof, sweeping down to a wide overhang, dwarfs the walls into insignificance. This, again, is a point of fundamental difference with the Chinese style. The Chionin as a type may be contrasted with any one of the great palaces of the Forbidden City of Peking. The proportions of the latter, particularly on the interior, stress a strong verticality which dominates any extension of floor area.

Japanese halls of the older sects, rebuilt in recent centuries on their original ground-plans, frequently show cross-sections which have preserved much of the spatial sense of their first erections. The Daibutsuden of Tōdaiji and the Kondō of Tōji, raised in their final form at the end of the seventeenth and sixteenth centuries respectively, have the high Chinese proportions of the Nara style.⁴⁹⁸ The early seventeenth century lecture hall of Enryakuji⁴⁹⁹ has a cross-section in the complex manner of Kamakura (fig. 194). The chancel is three bays deep; the rear two bays rise, high up, into a pseudo open roof, while the single bay in front is covered by another. The *raidō* across the front of the hall has a depth of two bays. The building is two-storeyed on the exterior, which normally entails a single bay *mokoshi* aisle running all around under the lower roof. Since the two-bay public room contains no interior columns, its outer half—under the low roof—is covered by low, slanting rafters, while the inner half rises much higher, to a coffered ceiling at the level of the top of the main eaves bracketing (fig. 196). The columns which support the main eaves are held by transverse beams running across the *raidō*. This awkward solution of a disagreement between plan and section is not found in earlier Japanese architecture; its

⁴⁹⁸ *Daibutsuden*: Amanuma, *Shiyō*, pp. 428-31; *Zūroku*, Momoyama-Edo vol., pp. 219-21; Masuyama, *N-shaji-shiryō*, p. 64. *Tōji Kondō*: *Zūroku*, *ibid.*, pp. 8-15; *N-shaji-shiryō*, p. 156.

⁴⁹⁹ *Shiyō*, pp. 436-7, pls. 160-2. The account of the final re-erection of the Daikōdō is given in the *Tōtō-gogakudōsha-narabini-kyakubō-sefu* 東塔五穀堂舎並各坊世譜 of 1798, pp. 6-7 (in the series *Tendaishū-zensho* 天台宗全書, Tōkyō, 1937).

"The present Daigaran 大伽藍 was ordered by Lord Iemitsu, from (1634) to (1642), at the same time as the Komponchūdō. A great hall of two storeys, it rises up like some towering peak. In serried ranks upon its red eaves are set out monsters and elephant forms; beauty is carried to its limit in the construction . . ."

The dedication record of a previous re-erection of 1285 (*Gunshoruiju*, *Shakkabu*, pp. 601 ff.) speaks of the Daikōdō of that time as possessing a *raidō* and as being a building of 9 *ken*. The present building is 9 by 6 (plan given by Fukuyama, "Tendai Shingon," *Bukk-kokogaku-kōza*, iii, fig. 6, alongside those of the building in the Heian era). The 1285 record, since it mentions no *men*, probably refers to the building as a whole instead of to the chancel merely. Presumably, therefore, the Daikōdō of 1285 was in plan very much like the existing hall.

use may be due to Chinese influence, since the same device is often seen in the Ming-Ch'ing style around Peking.⁵⁰⁰

The seventeenth century main hall of Kiyomizudera,⁵⁰¹ unusually complicated in plan, betrays in its cross-section a process of growth from simple beginnings. The chancel is covered by a high pseudo open roof, which continues down over aisles used by the priests in front and back. This portion of the hall stands on solid ground, and must represent a survival in form from the original hall of the early ninth century, with a chancel and ambulatory plan, probably seven by four, and a true open roof. Later centuries added a spacious *raidō* three bays deep, with an extra bay of porch, all this later construction being raised on a platform extending far over the edge of the hillside.

EXTERIOR AND INTERIOR BUILDING ELEMENTS

The details of Buddhist architecture from the fourteenth century on are characterized by a thorough eclecticism. The influence of the new styles imported from South China in the early Kamakura period had been strong enough to affect native building practises almost from their first appearance in Japan; this disintegration of Heian tradition continued in succeeding centuries until the identity of the "Japanese" style *Wayō*, was almost completely lost. At the same time the Chinese styles were themselves affected by Japanese conservatism. The *Tenjikuyō*, as we have seen, was able to maintain its independence for only a few decades, and persisted thereafter as a small repertory of details. The *Karayō* continued for centuries without radical change within the limits of its stronghold, the Zen sect. Outside of that its use in anything like a pure form seems always to have been exceedingly rare; as in the case of the "Indian" style, its effect on Japanese architecture in general has been that of a collection of details, rather than a strongly coherent whole. Except in Zen monasteries, therefore, and in rare cases of re-erection within a tenacious local tradition like that of Nara, formal Buddhist buildings of recent centuries have been designed not within any single style, but by an assemblage of motives from every source.

The essential qualities of this fusion must have been fixed in Japanese preference at a comparatively early date, thenceforth to constitute in themselves a powerful new tradition. In spite of its original eclecticism, the final Japanese "mixed" style, *Setchuyō*, proved itself far more firmly entrenched against further invasion than had the pure *Wayō* of the twelfth century. A last ripple of continental influence entered Japan in Momoyama with the Korean campaign of Hideyoshi, and was continued into early Edo by the arrival of emigrants from the collapsing Ming empire. Opposed by deep-seated national habit in religious architecture, however, its results were sporadic and limited in degree; and after the closing of the islands to further intercourse with the outer world, reaction overwhelmed even that mild unfamiliarity, retaining from the whole late Chinese style only a few minor

⁵⁰⁰ E. g., in the Ming dynasty Ta-fo-ssū 大佛寺, between Peking and the Summer Palace.

⁵⁰¹ Amanuma, *Shiyō*, pp. 431-3, pls. 158-9; *Zūroku*, Momoyama-Edo vol., pp. 192-6; Masuyama, *N-shaji-shiryō*, p. 167; Kiyomizudera texts in *Koji-ruien*, iii, pp. 607 ff. (giving a long list of burnings and re-erections, but no positive evidence of earlier forms). The picture scroll *Kiyomizudera-engi*, painted in 1517, shows a partial view of the main hall which corresponds very well to the existing form, with the platform in front raised on a high scaffolding above the ravine, and enclosed by corridor wings (*N-emakimono-shūsei*, i, p. 71). The last great conflagration was in 1629, after which re-erection was completed in 1633.

decorative ideas. Even the headquarters of the last Zen sect to be transferred to Japan, Mampukuji on Ōbakusan, founded by a Chinese and directed by Chinese abbots for generations, is half submerged in Japanese architectural conservatism.⁵⁰² Its buildings are much less Ming in style than the Zen halls of Kamakura are Sung. The pervading character of the monastery, indeed, is the sort of fusion typical of the period from Muromachi to Edo: Chinese in ground-plan and liturgical disposition, late Ming in such details as railings, column-bases, and roof ornaments, late *Karayō*—i.e. an adaptation of Sung—in other features like bracketing, and purely Japanese in all niceties of roof construction. The single exception to this overwhelming dominance of indigenous tradition in the Edo period is provided by three branch monasteries of the same sect, Kōfukuji 興福寺 Sōfukuji and Fukusaiji in Nagasaki;⁵⁰³ a port city without cultural history and the one point of contact between Japan and foreign nations, to which the seventeenth century style of Fukien was transplanted by Chinese emigrants largely for their own use (fig. 117).

Application of the features of the "mixed" style to the design of a given icon hall seems to have been directed by a varying balance of convenience and ornamental effectiveness. The former demands that the roof be extended forward (and often also to the rear) as a spacious *kōhai* porch to shelter the arrival of worshippers and their removal of foot-gear; it makes almost inevitable, also, the surrounding of the building by a wide wooden

⁵⁰² Tanabe, "Zenshū," *Bukk-kokogaku-kōza*, i, pp. 65 ff.; Amanuma, *Shiyō*, pp. 442-4, pls. 168-70; *Zūroku*, Momoyama-Edo vol., pp. 206-17; texts in *Kōji-ruien*, iii, pp. 1071 ff. The founder, Yin-yūan 隱元 (Japanese pronunciation Ingen, 1592-1673), had become the abbot of the Chinese mother temple, Huang-po-shan 黃蘗山 in Fukien, in 1633. In 1654 on the invitation of a Japanese priest he crossed the sea to Nagasaki, and took up his residence at the local Zen temple of Kōfukuji 興福寺. For several years he travelled from one temple to another, in 1658 reaching Edo and being welcomed by the Tokugawa Shōgun. In 1661, having been called to take charge of the newly formed Zen monastery at Ōbakusan, he began its erection as first abbot, taking the Chinese temple of the same name as his model (for which, see above, p. 216). The first 13 abbots were all Chinese, invited over from the Ch'ing; it was only in 1738 that control first passed into Japanese hands.

⁵⁰³ Kōfukuji: cf. Tanabe, "Zenshū," pp. 60-1, fig. 9 at front (the main hall). First of the Nagasaki emigré monasteries, traditionally founded by one Chên-yūan 真圓 from Kiangsi, Fu-liang-hsien 浮梁縣, who came over around 1620, became a monk in Nagasaki, and built a small retreat on the site of the existing monastery. The erection of a formal layout was undertaken by the second abbot, after his arrival in 1632, between 1633 and 1641. Oldest remaining building is the triple gate, which may go back to 1663; the main hall is a 19th century rebuilding, though in Chinese style.

Sōfukuji: Tanabe, *op. cit.*, pp. 62-5; Amanuma, *Shiyō*, pp. 444-7; *Zūroku*, Momoyama-Edo vol., pp. 238-63. Tanabe explains the erection of so many Chinese temples in Nagasaki at the same period as being an attempt to prove that those involved were not adherents of Christianity, then being rigidly suppressed. This one was founded by emigrants from Fukien in 1629, and had its principal period of expansion at the mid century. It was the third abbot, I-jan 逸然 (an emigré of 1644) who summoned Yin-yūan from Huang-pi-shan, with the purpose of reviving and reforming the Zen sect in Japan.

Important remaining buildings are the "triple" gate of 1849, the "gate of the first summit" of 1693, the hall of protecting the Law of 1731, the main hall of 1646, and the bell and drum towers of 1728.

Fukusaiji: Amanuma, *Zūroku*, Momoyama-Edo vol., pp. 264-89. First founded by an emigré of 1628 from Ch'üan-chou, Fukien, one Chiao-hai 覺海, who set up a small shrine to worship a Chinese sailors' goddess. In 1649, a certain Chieh-ying 戒瑛 was called over from K'ai-yüan-ssü 開元寺 in Ch'üan-chou to be its first abbot, and formal buildings were erected. The principal structures remaining from this period are the middle gate, the "front hall," and the main hall.

verandah sheltered by the eaves, to facilitate circulation to all doorways. The porch narrower than the whole facade, or *kōhai*, seems to have been a purely Japanese invention, and no Chinese influence has affected the wooden balcony and railing since Tang. In those elements, therefore, the details are necessarily based on the "Japanese" style. The intercolumnar bracketing of the porch will be a sculptural version of the *kaerumata* typical of *Wayō* practise; aside from sculptural elaborations, the one obvious departure will be the stone bases of the porch pillars, in which moribund "Japanese" tradition will be replaced by the more ornamental *Karayō* shape. In the rest of the building, the balcony and the raised interior wooden floor—integral features of the "Japanese" style—conceal all bases, and obviate the necessity for any formal treatment. Wall columns will be connected and braced by the stout column-enclosing beams of native practise, necessary in a land of earthquakes. These, in turn, will make preferable the selection of the heavy moulded door and window frames of the *Wayō*, to which the beams serve as lintel and sill. The doors themselves, on the other hand, in a building of any pretentiousness, will be panelled in the "Chinese" formula, more appropriate in its elaboration than the plane surfaces of the rival style. Windows will be latticed by bars of sturdy proportions—the thin, patterned grille-work of early Zen halls must have soon proved its impracticality—and may be framed either in the *Wayō* oblong or the *Karayō* cusped "arch." Bracketing, again, may follow either style, or combine features of both. On the interior, entablature details may be chosen at will from the eclectic repertory; beams, however, will almost always follow the more decorative *Karayō*. Ceilings are usually variants of native tradition, since the flat "mirror" form of the *Karayō* with its painted dragon is too closely identified with Zen iconography for general use by other sects; sometimes late Ming influence will be seen in the adoption of a type with large, shallow coffers, filled with painted medallions. The pure *Karayō* characteristic of exposed interior bracket cantilevers never appears except in buildings erected for special reasons on a Zen plan. The altar platform and its tempietto shrine are normally *Karayō*, in deference to the decorative richness of the style. The ornamental transoms, finally, which separate chancel from public areas, will represent an ancient Japanese tradition, modified by a wood-carving technique and subject matter borrowed from late Ming.

Design by such a process of free choice, bound only by convenience and ornamental effectiveness, is the first characteristic of a late style, which has been divorced by its own inescapable evolution from all functional vitality. Japanese religious architecture was kept partially alive into the early Edo period by the necessities of plan development posed by popular Buddhism, and by the structural difficulties involved in work of such magnitude. After the great halls of the Chionin and the West Honganji, all its problems were solved and reduced to formulae, and nothing remained to sustain even a one-sided life. The final step, marking the death even of continuity of tradition, has been reached in the twentieth century with the advent of archaeological imitation of the vanished "pure" styles.

The series of details discussed below has been reduced to those which show a marked development during the late period. Others, like column bases and verandahs, must be passed by except for their mention in the preceding description of the typical late icon hall.

In a discussion concerned primarily with the development of Japanese Buddhist architecture, the Zen temples of Nagasaki, with their almost purely Chinese style, might be omitted entirely. At the same time, it is well to notice that they furnish something more than evidence of a direct connection, in the seventeenth and eighteenth centuries, between the Japanese port and the coastal regions of south China. With a few published buildings of Fukien, Chekiang, and Kuangtung, they serve as the best remaining proof from the continent of the existence of the *Tenjikyō* or "Indian" style in the same provinces five hundred years earlier. The erections of Sōfukuji, especially the "Law-protecting hall," show several of the unique structural and ornamental features found in the Tōdaiji great south gate, which since the thirteenth century had disappeared almost entirely from Japanese practise. The brackets are set in tiers through the body of the column, and run out on transverse axes only (except at the final step where they support the eaves purlin); there are no inter-columnar units. Projecting timber ends are carved into mouldings not far removed from the twelfth century *Tenjikyō kibana*; and the bearing-blocks are elaborated by the typical *sarato* moulding of the "Indian" style (fig. 117). The cross-section of the "Law-protecting hall" is of interest from another point of view. The open front porch is covered by its own curving "gable" inside, the design which the Chinese call *chüan* 卷; the inner room terminates in a larger straight-line "gable," supported by the same sort of ornamental beam construction; while at the back, above the altar, is a space covered by a flat ceiling. Over all, on the exterior, is a single hip-and-gable roof. This is a scheme previously discussed, found frequently in late south Chinese architecture, and mentioned in the late Ming gardening manual *Yüan Chih*, written by a native of Kiangsu.⁵⁰⁴ It is the sole exception, and a provincial one, known to me to the general rule that there must be a direct correspondence between the interior and exterior designs of a Chinese building. In orthodox Ch'ing practise in the north, the same sort of interior cross-section relationship—between the porch with its curving "gable" and the larger chancel—is frankly expressed outside by separate roofs.

BRACKETING:

Bracketing in the official Sung style, as borrowed by the *Karayō*, continued without noticeable modifications throughout late architecture; appearing, for example, in pure form in the highly eclectic seventeenth century founder's hall of Hyakumanben in Kyōto. Later Chinese advances toward smaller scale and multiplication of units seem to have been entirely without influence in Japan, except on the unique, transplanted monasteries in Nagasaki. With the late sixteenth century, a sculptural enrichment of the formula appeared, borrowed probably from the Korean style seen by the Japanese under Hideyoshi;⁵⁰⁵

⁵⁰⁴ See above, pp. 156-7.

⁵⁰⁵ Late Korean bracketing, while usually indebted to the vegetable world for its profusion of ornamental forms, not infrequently uses animal combinations which suggest the Japanese. Three types may be cited. In one, the normal bracketing is elaborated by a large dragon emerging from the top of each column just below the capital (neck and fore-legs on the outside, rear and tail on the inside). Examples appear in the main hall of Sin'gyesa 神溪寺 (Kōgen, Kōjō-gun, Shimbokumen 江原高城郡新北面; cf. *Chōsen-koseki-zūfu*, xi, fig. 5433); and may be compared with the similar use in Japan of a lion, elephant, or dragon

the projecting cantilever ends are carved in rich detail into the elongated heads and bodies of elephants, lions, or dragons (fig. 203). The expense of such elaboration must have made its adoption always exceptional. It is seen in the early seventeenth century lecture hall of Enryakuji on Hieizan, and at its climax of costliness in the Nikkō shrines; thereafter it was maintained throughout the Edo period as a traditional feature of the mausolea of the Shōguns, but seems to have soon died out elsewhere.

Column-head bracketing of the late *Wayō* type is distinguished chiefly by the stiff gracelessness of its proportions and curves. The intercolumnar strut is usually splayed widely at the bottom; sometimes it supports its beam through an intermediate cushion-timber with moulded ends, taken from the "Chinese" repertory; and sometimes a kind of projecting skirt is introduced between strut and bearing-block, producing the type called "*minozuka*" 簀束, or "straw raincoat strut." All these variants, bearable in Muromachi, are by the Edo period uniformly unpleasant in contour and proportioning.

The sculptural preoccupations of late Japanese architecture are seen to the full in the final evolution of the *kaerumata*, the more elaborate *Wayō* intercolumnar support. By the end of Kamakura what had originally been a small, floral accent in the empty center of this member had grown upward and out to the limits of the frame. The design had in some cases become pictorial, rather than formally decorative, and thus had advanced, in a few fourteenth century examples, even to an abandonment of symmetry. In succeeding centuries, these two tendencies, physical expansion of sculpture and pictorialization of design, were carried to an extreme. Many Muromachi *kaerumata* are still no more than ingenious variants of the floral arrangements of late Kamakura, presenting an intricate, symmetrical pattern of solids and voids carved with only a suggestion of relief. Others, belonging chiefly to Shintō shrines, show a marked progress. The subjects of the sculptural fill are those of contemporary screen painting: compositions of foliage, flowers, and fruit, or set animal and vegetable combinations, tiger and bamboo, lion and peony, heron and lotus. The designs are resolutely assymmetrical, and there is a noticeable increase in depth of carving.⁵⁰⁶

The pace of this evolution was accelerated, and its character intensified, by the great

form in the same position. In another type, the normal bracketing terminates at the top in a dragon's head, set above two cantilever beaks. This appears, e.g., in the Pokwangjōn 普光殿 hall of Sinkwangsa 神光寺 (Kōkai, Kaishū-gun, Sekidōmen 黃海海州郡席洞面; *ibid.*, fig. 5339). In a third variety, closest to the full elaboration of Japanese practise at Nikkō, the bottom tier terminates in a beak, the next in a dragon, and the topmost in a bird or animal; cf. the main hall of Sōunsa 棲雲寺 (Heihoku, Neiben-gun, Neibemmen 平北寧邊郡寧邊面; *ibid.*, fig. 5306).

These forms certainly did not originate in Korea, where they are always somewhat exceptional, and are crudely handled. A significant link is furnished by their presence in the early 17th century Manchu palace at Mukden. Here the same dragons, more vigorously carved, squirm through the architraves, or writhe around the columns (cf. the illustrations in the *Hōten-kyūden-kenchiku-zūshū* 奉天宮殿建築圖集 by Itō 伊藤, Tōkyō, 1929). There is no real Manchu style of architecture, so that the ultimate inspiration for the idea must be Chinese; provincial, since it is conspicuously absent from the official Ming-Ch'ing manner of Peking.

⁵⁰⁶ For comparative late *kaerumata* forms, from Muromachi to Edo, cf. Amanuma, *Shiyō*, pl. 152; Masuyama, *N-shaji-shiryō*, pp. 140, 157-8, 176; Kawakatsu, *Kokenchiku-nyūmon*, figs. 45-9; also photographs throughout the later volumes of *Zūroku*.

increase in building activity in Momoyama and early Edo which celebrated the magnificence of Hideyoshi and the first Tokugawa Shōguns. The rapid progress of a generation is seen in the buildings of Nikkō, in the contrast between the earliest buildings—still Momoyama and transitional in style (fig. 204)—and the climax of attainment in the latest.⁵⁰⁷ In the developed Nikkō style, the sculpture is fully in the round, and is carried out at small scale with a complex interrelationship of planes. There is an important change in subject matter, adding pure illustration to the former decorative and pictorial repertory, which seems to have been the result of late Ming influence and thus typically assumes the form of some scene from Chinese history or fable, enacted by puppet figures within the *kaerumata* frame. The whole element, with all interest concentrated at its center, is in outline and proportioning at a much lower level than its Kamakura predecessor.

Kaerumata of the later seventeenth and eighteenth centuries elaborate the Nikkō standard by an even greater depth of relief and complexity of carving. The sculpture, which even in Momoyama had begun to encroach upon its frame, may now hide it in part or almost entirely with foliage, birds' tails, or cloud scrolls; as a logical last step, the "legs" are sometimes omitted entirely, and nothing remains but the intricacy of the sculpture, roughly following the lost *kaerumata* outline (fig. 205). Such late examples illustrate a remarkably high level of the wood-cutter's technique, combined with a characteristically Japanese ingenuity of design. As elements of architecture with a pseudo-structural function, set normally so far above the eye that their amazing detail—all the patient undercutting of feathers and leafage, or the ingratiating drollery of a Chinese tale—is lost in confusion, they are deplorably irrelevant.

In works of late Edo and Meiji, a sort of neo-classical reaction has effected a return to simplicity and boldness of scale, the "legs" being once more sturdy, and the sculpture reduced to a small, central ornament (fig. 206). Without the sense of form lost through centuries of dalliance with other ideals, however, the virtues of these *kaerumata* merely accentuate their ugliness. The ultimate, twentieth century phase of scholarly archaeology has produced accurate imitations of the *kaerumata* of early and middle Kamakura, and even a reconstruction of the vanished version of the Nara period.⁵⁰⁸

A sub-class of *kaerumata* without any other carving than that of the legs, appears in buildings of less pretentiousness. The progressive degeneration of form—undisguised by amusing ornament—which this type illustrates with distressing clarity, was hastened

⁵⁰⁷ Nikkō illustrations in *Zūroku*, Momoyama-Edo vol., pp. 434-69. The remains of the first Shōgun, Ieyasu, were transferred to Nikkō in 1617 after a provisional mausoleum had been completed in the previous year. In 1624 Iemitsu undertook the enlargement of the layout, and initiated a second period of construction—calling on the whole of Japan for contributions—which was not finished until 1636. Most of the buildings of Ieyasu's shrine, the Tōshōgū 東照宮, date from this work of expansion. Iemitsu died in 1651; his shrine, Daiyūin 大猷院, was completed (largely on the model of the earlier, at a slightly smaller scale) in the next three years.

⁵⁰⁸ Examples which I have seen myself, dating in the present era of Shōwa, include the new main hall of Jingōji on Takaozan west of Kyōto, which imitates a late Kamakura type; the new Amidadō on Hieizan, which imitates late Heian, in a design strongly reminiscent of the Amidadō of Hōkaiji; and the new main hall of Kongōbuji on Kōyasan, for which the architect was Professor Amanuma, and in which the *kaerumata* have their historically earliest, inverted "V" form.

in early Edo by the adoption of a peculiarly repellant form of "shoulder" foliation; the malign influence of which has continued to the present day.

An appropriate characteristic of bracketing in the "mixed" style is its eclectic combination of forms taken from different sources. In the most lavish buildings of Nikkō, the normal richness of a *Karayō* entablature, first exaggerated by a sculptural transformation of forms, is carried even further by sculptured *kaerumata* crowded between the bracketing units. The monumental tradition of the "Japanese" style may be modified by "Chinese" influence: the use of two cantilever ends instead of one, or the embellishment of the single cantilever by *Karayō* details. A frequent practise in buildings of eclectic elaboration is to place a *Wayō* bracketing system on the more ornamentally effective T-shaped beam combination of the "Chinese" style, the upper timber resting on the column top and the lower piercing it (fig. 202). The essential features of *Tenjikyō* bracketing are extremely rare in late architecture, but the bearing-block typical of the style—with a dish-shaped member beneath the moulding—often appears in one special use. The roof of the front porch, in the conventional late icon hall, is held by a purlin supported by column-head bracketing and an intercolumnar *kaerumata*. This purlin usually extends some distance beyond the porch pillar, to take care of a wide roof overhang. The extension is supported by bracketing which rises not from the pillar capital but from the column-piercing beam, itself carried a foot or more beyond the corner. The beam thus becomes a sort of bracket arm; and since it pierces the pillar instead of emerging from the capital, justifies the use of "Indian" style detail in the bearing-block which it carries.⁵⁰⁹

The late versions of the *tabasami*—the large, wedge-shaped block which acts as a brace between the porch pillar bracketing and the roof rising behind it—exhibit the same sort of sculptural development as contemporary *kaerumata*; reaching a climax of intricacy in early and middle Edo, when the whole form becomes a tangle of three-dimensional foliage, blossoms, and birds (fig. 209); and thereafter stiffening by reaction into an ungainly flatness, ugly in outline and monotonous in surface ornament.

BEAMS IN THE WALL PLANE:

The strengthening of the typical late icon hall by *Wayō* column-enclosing beams in three or more tiers, has been mentioned at the head of this section; and should be set in contrast with the practise, noted directly above, of using an ornamental *Karayō* beam combination at the column tops. A further modification of traditional principles involves, in such a combination, the replacement of the simple lower timber piercing the column tops by the decorative form of beam which had previously been used only in interiors of "Chinese" style. We have seen this change foreshadowed at the end of Kamakura, in the axial bay of the main hall of Futaiji in Nara; later examples of the practise are rare until the eighteenth century, when it becomes an established feature of conventional design, applicable all around the building (fig. 205). The form and characteristic ornament of this member in standard late use will be discussed under its proper sub-heading of "Interior Beams."

⁵⁰⁹ E. g. *Zūroku*, Momoyama-Edo vol., pp. 342-3 (from a minor shrine building, in the precincts of the Itsukushima-jinsha; chosen merely because of the availability of the illustration).

The ends of the *Karayō* beam combination, projecting beyond the corner column, follow in most late examples the general *kibana* conventions established in Sung, varying only in the skill and boldness with which their mouldings are cut. The ends of the column-enclosing beams do not project, since each forms a miter joint at the corner with the corresponding beam at right angles to it. The only marked evolution in beam ends is that undergone by the timber which pierces the tops of the porch pillars. This termination had already assumed decorative forms in late Kamakura, varying apparently as the source of the tradition followed was "Indian" or "Chinese." During Muromachi the shapes traceable to the former source, with a silhouette of abstract mouldings and a long channel leading in to a heart-shaped perforation, were gradually altered by the progress of wood-carving technique.⁵¹⁰ In Momoyama they were finally transformed into the elephant's head which they had long resembled, now rendered realistically in the round. As a variant, the period developed also a porch beam terminating in the front half of a lion, with raised fore-legs, which became even more popular in Edo. The two forms are sometimes seen combined in late versions to produce a monster with the head and trunk of an elephant and the paws of a carnivore; occasionally they are replaced by the head of a dragon. In the final phase of technical mastery and of architectonic decadence, heads and bodies may be twisted out of line, so that the animals seem to be turning to look forward at the advancing worshipper. At Nikkō this zoopomorphic treatment is used not only for porch beams but in the main block of the building as well, as a modification of the under member of the conventional *Karayō* beam combination; and here it may be applied not only at the corners—with the lion's head emerging beneath a still formal upper timber—but also as a projection in the transverse sense on every column axis, adding additional plastic emphasis to the rhythmic subdivision of the facade.

DOORS AND WINDOWS: TRANSOMS:

A brief outline of the door, window, and transom treatments common in the "mixed" style has already been given. All three elements receive elaborate sculptural embellishment in the Edo mausoleum formula standardized at Nikkō. In Buddhist architecture proper, any decoration of the window other than that furnished by an arched, "Chinese" frame is rare. In the formal icon hall, again, the doors are usually of the panelled, "Chinese" type, enlivened only by the studded metal plates which strengthen the framework, and by an open grille at the top (fig. 202). A sub-stratum of Buddhist building practise, linked by small scale and lack of monumental formality to the mausoleum and Shintō shrine, is less restrained. In this class, represented chiefly by the small, single-opening gateway, the panels may receive various sculptural additions. A treatment typical of the Momoyama style places the (usually floral) emblem or *mon* 紋 of the donor at large scale in a single panel running across each door. In Edo a favorite motif is the playful Chinese lion, carved often in the highest relief, which may be placed in several panels against backgrounds variously plain or floral. The ornamental style may also be applied

⁵¹⁰ For charts of *kibana* forms from Muromachi to Edo, cf. Amanuma, *Shiyō*, pls. 126, 150; *N-shajishiryō*, p. 141; *Kokenchiku-nyūmon*, figs. 33, 38. For probable continental prototypes for the zoomorphic *kibana*, see above, note 505.

in icon halls of informal type, linked more closely by plan and construction to the palace than to the traditional temple. An excellent example—hardly surpassed even at Nikkō for wealth of detail—is the axial pair of doors of the main hall of Zuiganji in Matsushima (fig. 210).⁵¹¹ Here the large panels at the top are filled with a patterned grillework in good Zen tradition; the rest contain closely crowded floral, wave, and cloud designs, while the whole doorway is framed by vertical and horizontal friezes in the same lavish technique. A general low relief makes this Momoyama version a rich but not too distracting part in the whole hall design. At the apogee of sculptural boldness in the eighteenth century, when the lions may project a foot beyond the frame, all sense of unity is lost in baroque luxuriance of mass.

The sculptured transom seems to have been developed for domestic use, and thus appears in sumptuous Momoyama form in the abbot's apartments of the West Honganji in Kyōto, originally a part of the Fushimi 伏見 Castle built by Hideyoshi.⁵¹² In the Edo period, the formula was extensively used as a part of the eclectic repertory of the main hall, primarily to emphasize the distinction between chancel and public areas. Such later versions parallel the development of the *kaerumata*, both in the increasing depth of their relief and in their frequent use of illustrative subject matter taken from Chinese sources.

ROOFS AND THEIR ORNAMENTS:

The roofs of late halls—normally tiled for greater monumentality—show an increasing use of the intersecting gables already in tentative use in Kamakura. In the Edo period the curved “Chinese” gable, *karahafu*, may be used to emphasize the center bay of a wide porch, and may even interrupt the eaves lines of a Zen icon hall or monumental gateway. In the smaller, “Chinese” gates, *karamon*, roofed by cypress shingles, gable intersections are standard, the curved form facing to front and rear and the normal triangle opening on each end. Over the entrance to priests' apartments—less bound by tradition than the main hall—transverse gables may be doubled for the same emphatic effect as that gained by the multiple pediments of Italian Baroque, a curve over the porch with a larger triangle above and behind it, running back into the main roof.

The outline of the late *karahafu*, rising abruptly and almost flat on top, is markedly inferior to the long, gradual curve of the Kamakura original.

The tile ornaments of the main ridge follow two long-established traditions, the demon's face and the abstract *shishiguchi* topped by three flaring tile-ends.⁵¹³ The former in Momoyama and Edo versions attains a climax of bold plasticity, with a horned, jutting forehead, protruding nose and jaw, and deep-sunk eyes and mouth. In the latter, Kamakura convention is carried on without greater change than a loss of subtlety. On Edo gable-ends, these acroteria are typically framed by formal tile cloud-scrolls, roughly similar in outline as they descend to the separated halves of *kaerumata*. A fully equipped roof

⁵¹¹ For Zuiganji buildings, see Amanuma, *Zūroku*, Momoyama-Edo vol., pp. 134-83. After a purported foundation in the 9th century, the fortunes of the monastery were revived by the lord of the Sendai region, Date Masamune 伊達政宗, who had it rebuilt between 1604 and 1609.

⁵¹² *Zūroku*, *ibid.*, pp. 27-9. Ponsonby Fane, *Kyōto*, p. 289.

⁵¹³ Cf. *Zūroku*, *ibid.*, pp. 484-504 for tile forms.

is provided also with simpler acroteria at the ends of the gable and hip ridges, and ornamental finials at the corners. In certain districts these last assume imaginative forms which suggest an influence from the highly developed tile art of south China. Along the shore of Lake Biwa below Hieizan, for example, I have seen in one village temple, dedicated to Yakushi, a gateway with finials in the shape of small warrior deities, guarding against disease; on another gate nearby, Chinese sages riding on dolphins; on many buildings in the Tendai headquarters of Saikyōji 西教寺, monkeys in amusing attitudes. These instances may represent isolated, regional survivals of a once general practise. Metropolitan temples in Kyōto and elsewhere, most of which look as if their roof ornaments had been restored in the nineteenth century, show instead a monotonous standardization within a meagre repertory of Chinese lions and lotus buds.

BEAMS AND INTER-BEAM SUPPORTS; THE GABLE FIELD:

As I have mentioned, the *Karayō* type of beam is used almost exclusively in eclectic halls of any degree of pretentiousness. The evolution of this originally simple member between Kamakura and late Edo is almost as clearly marked as that of the *kaerumata*. The "Chinese" beam possessed at the outset a number of distinguishing peculiarities. Its under edge was paralleled by an "eyebrow," *mayu*, originally a very narrow sinkage. Its downward curve to the impost at each end was cut across by a diagonal line, *sodegiri*, at first achieved merely by a small difference of plane. The under surface of the beam was embellished by a long, narrow, sunk panel, *shakujōbori*, terminating in a simple half quatrefoil. All of these features underwent a progressive development, the major portion of which was accomplished in the Edo period. At the beginning of the seventeenth century, the depth of the "eyebrow" might be as much as a third that of the whole beam, and the sinkage might be subdivided into two or three parallel steps. The diagonal had become a foliated contour, continued a foot or more toward the center by large, incised scrolls (fig. 180); while the soffit panel had taken the form from which it derives its name of *shakujōbori*, or "priest's staff," enriched by parallels and with a new, complex head like that of the Buddhist "crozier." The final standardization in the eighteenth century went well beyond even this point. In typical versions from middle Edo to Meiji, the "eyebrow" occupies a full half of the beam, and is given an elaborately moulded cross-section. The diagonal's rinceau has the heaviness of a Roman frieze, and is incised with an ingenious variation of levels, some deep and others shallow, to give pictorial light and shade; the whole ornament may extend from the end of the beam more than halfway to the center (figs. 205, 207, 209).

The rising *ebi-kōryō* version of the "Chinese" beam has been a standard feature of Shintō architecture since late Kamakura, used as a means of transverse connection between porch pillars and the columns of the main block. This device sometimes appears in Buddhist practise as well, the member receiving the same ornamental treatment as the normal interior beam. In the mausolea of the Tokugawa Shōguns, the *ebi-kōryō* in such use is sometimes supplanted by a realistically carved dragon, whose head projects in front of the porch entablature; an innovation taken directly from the continent.²⁰³

Since almost all late hall interiors are enclosed by flat ceilings, the only usual oppor-

tunity inside the building for a vertical combination of beams and inter-beam supports is as a pseudo-structural frieze beneath the ceiling brackets. Beams and bracketing are connected alternately by cut-out *kaerumata* and squat "big bottle posts," *taiheizuka*; the whole treatment is late, without any structural justification, and as disagreeable in general effect as its details are corrupt. A more traditional use for the combination has survived in the gable field. Here the source of design in almost all eclectic buildings is the old *Karayō* formula of the earliest Zen halls, the two beams separated by two *taiheizuka* and the upper supporting a third strut as the kingpost. In the very large buildings of popular Buddhism erected during the Edo period, the greatly increased depth of the interior has produced roofs—and thus gable fields—of unprecedented size, making possible a new elaboration of treatment. The longer beams are thus typically separated by three supports, two struts and a large *kaerumata* between. The lower beam, raised some distance above the end roof, is frequently held by three-headed brackets spaced to conform with the supports above; in the most complicated examples, of the eighteenth century, this bracketing may be in two steps instead of flat against the wall, with parallel stripping between in imitation of the typical *Wayō* "cornice" (fig. 211). The *kaerumata* used follow the trend of fashion, with a sculptural fill which projects far beyond the frame or supplants it entirely. In middle and late Edo, all interstices between the pseudo-structural framework of beams and supports may be crowded with a heavy rinceau in relief. The *ebi-kōryō* makes an occasional appearance in gable fields of less than this ultimate degree of lavishness, as a sort of prop on the outside of the strut holding the upper beam. Occasionally, again, the strut itself is modified to the so-called *oigata*, or "pannier" form, by the addition of appendages on each side, which may be completely foliated or may take the shape of *kaerumata* legs.

The typical late gable is decorated by three pendants hiding the projecting purlins, a *gegyo* at the apex and two *ketakakushi* well down the slope of the barge-boards.⁵¹⁴ In these the Kamakura formula is carried on with a marked decline in suavity of curve and proportioning. The spirals are carried deep into the body of the pendant; the outlines approach a semicircle, or relax into an incoherent meander. The "fins," *hire*, at either side are sometimes carried so far along the bargeboards that those of *gegyo* and *ketakakushi* almost meet, destroying the effect of the long bargeboard lines and giving the gable instead the look of a truncated trefoil arch. As in the case of the *kaerumata*, the *gegyo* from the Edo period on may become completely sculptural, the usual transformation being a phoenix in flight.

DECORATION:

In the mausolea of the Shōguns and great daimyōs of the Edo period, and in a few contemporary Shintō shrines, interiors and exteriors alike are decorated with the utmost lavishness, all the arts—painting, wood-carving, metal-work, lacquering—being combined to leave no portion of the building without ornament. Whether for economy or because of greater conservatism, the more monumental architecture of Buddhism seems to have been quite unaffected by this orgy of decoration. Except for their greater elaboration of

⁵¹⁴ For charts of *gegyo* forms, see *Shiyō*, pls. 127, 154.

sculptural detail, the exteriors of late halls normally follow the simple practises of the past. Those belonging to the older sects often retain the original color scheme of red and yellow; while those of the sects dating from Kamakura are usually left unpainted except for a coating of white on the cut faces of brackets, cantilever "beaks," etc. Late interiors are typically enriched in restricted areas only, rather than by the all-over decoration of Nara and Heian. The columns directly adjacent to the altar may be gilded, in harmony with the gilding of the altar shrine, the furniture, and the hangings; in the conventional Shin hall, the division between worshippers and priests is made as magnificent as possible by painted sliding panels and painted or gilded transom sculptures; the rest of the interior is normally left in natural wood.

The history of monumental building in Japan begins as a tributary to the much older and stronger current of architectural practise in China. At this last phase of the Japanese evolution, it is interesting to draw the comparison between the two countries once more, as a measure of change and racial preference. After twelve hundred years, what was in the beginning the closest possible similarity has widened out to become an unbridgeable gulf. The "golden" hall of Tōshōdaiji is to all intents and purposes a Chinese building set up on Japanese soil. A temple hall of the Edo period is as unlike its contemporary Chinese cousin in the nth degree as is possible (for two traditions sharing a common building material and a common past). Both stand as more or less degenerate successors to the ancient and honorable traditions behind them. The comparison becomes the more instructive when it takes in those traditions as well, and so shows the direction of advance in each country. Edo temple architecture, set against its own ancestors of Nara, Heian, and Kamakura, is far freer and more efficient in ground-plan, more certain and bolder in structural science, more lavish in sculptural ornamentation. As against the relatively narrow repertoires of earlier styles, it has the endless variety of frank eclecticism, undisturbed by logic or principle. Ch'ing architecture, on the other hand, is far less imaginative in design, more monotonously regular in plan and details than its predecessor of Sung, for example. The Chinese development seems to have had its phase of undisciplined sculptural exuberance as early as Han; the later styles have become more and more severely architectonic, at least in the north. The Ch'ing monumental style of Peking and its environs, underneath a blaze of color is more austere and rigidly circumscribed than any Palladianism in the West; satisfied with the endless repetition of a dozen standard types, as suspicious of sculpture as the most fanatical neo-classic purist. The Ch'ing style in toto is like a series of Chinese ancestor portraits, impeccably dignified, handsome in shape and color, impressive at first but soon monotonous. The Edo style, from the guide-books' Nikkō down, has the different monotony of a series of Kunisada prints, rich, accomplished, striking; and wavering always on one side or another of the border-line of vulgarity.

APPENDIX

I

A. *Hōryūji*: Unimpeachable evidence for the first completion of *Hōryūji* is given by the inscription incised on the rear of the bronze halo of the image of Yakushi 藥師, on the altar of the Kondō:

"When, in the august reign of the Emperor who ruled from the Great Lakeside Palace 池邊大宮 (i. e. Yōmei-tennō, 586-8) the great Imperial person sickened—the year being that of 丙午 (586)—he summoned the great Imperial Empress and the Prince Imperial, and deigned to express this vow, saying, 'I am in great sickness; wishing for recovery, I order that a temple be erected and an image of Yakushi made.' However, at that time an Imperial demise was vouchsafed, and the work could not be carried out. Wherefore the great Imperial Empress, (when she came to) rule from the Palace of Oharida 小治田宮 (Suikō-tennō, 592-629), and the sainted Prince of the Eastern Palace (Shōtoku) deigned to take upon themselves the great command, and in the year 丁卯 (607) carried it out" 仕奉.

(For this text with photographs of the original and of the Yakushi image, see *Zōzō-meiki* 造像銘記, Tōkyō, 1936, pls. 1, 2).

The history of *Hōryūji* for a century after this establishment, however, is extremely uncertain; so much so that the date of the existing buildings of the monastery has for a generation been the most hotly contested problem of Japanese scholarship. A bibliography of learned articles dealing with the subject is given in *Yumedono* 夢殿 xii (issue on *Hōryūji*, 法隆寺諸問題), and totals 158 titles, as of Dec., 1934; the number must be considerably larger today. Theories have been developed along four main lines. These, with their chief protagonists, are: (1) the existing buildings are those completed in 607; Sekino T.; (2) the monastery was destroyed by fire in 670, and a serious effort at rebuilding was begun only in 708; Kita; (3) the fire took place in 643, and the rebuilding from around 648 to 680; Ono 小野; (4) the fire took place in 610—Hirako 平子—or in 607—Aizu 會津—and rebuilding began around 625, to continue for a decade or so. To produce such widely divergent hypotheses, the evidence must obviously be plentiful, and every item in it suspect for one reason or another, so that no assertion cannot be met by an equally plausible denial. I shall summarize the main arguments below, first by a presentation of the most important evidence submitted, and then by an analysis of the conclusions drawn. I shall cite no bibliography except the index mentioned above, and the exhaustive study recently published by Aizu, *Hōryūji Hōkeiji Hōrinji Konryū-nendai no Kenkyū* 法隆寺法起寺法輪寺建立年代の研究, Tōkyō, 1933, in which full reference is made to the works of other disputants.

First the principal evidence from literary sources

I. As to a General Conflagration:

1. *Nihon-shoki* (national history, completed—probably by Imperial order—in 720): Tenchi-tennō, 8th year (669), 12th month, p. 483; "At that time there was a fire at the temple of Ikaruga 于時災斑鳩寺." (i. e. at *Hōryūji*, the names being synonymous).

2. *Do.*: 9th year (670), p. 484: "Summer, 4th month, 30th day. After midnight there was a fire at *Hōryūji*; not one building was left. There was great rain, with thunder 災法隆寺一屋無餘."

3. *Shōtoku-taishi-dembōkekki* 聖德太子傳補闕記 (biography of Prince Shōtoku, probably 9th century): "In the year 庚午, 4th month, 30th day, at midnight, there was a fire at the temple of Ikaruga 有災斑鳩寺. The Prince addressed his consort, Kashiwade no Iratsume, saying . . ." (Prince and consort died in 622, so that the cyclical characters given for the date of the fire must here mean 610, before his death, rather than 670).

4. *Shōtoku-taishi-denreki* 傳曆 (biography of Prince Shōtoku, compiled in 917): "Moreover, it is said that in the 庚午 year, 4th month, 30th day, at midnight there was a fire at *Hōryūji*; although this is not recorded in the histories. This year was the 15th of Empress Suikō (i. e. 607)."

5. *Fusō-ryakki* (history of Japanese Buddhism, by priest Kōen 皇圓, died 1212): "Suikō-tennō 15th year (i.e. 607), being the year 丁卯 (also 607), 4th month, 30th day, at midnight, the temple of Ikaruga was burned 斑鳩寺火災."

6. *Do.*: Tenchi-tennō 8th year: "In this same year the temple of Ikaruga had a fire 斑鳩寺火."

As Aizu points out, it is fairly clear that (1) and (6) refer to one fire, and the rest to another; for with these, although the cyclical characters differ, everything else is the same. The first may have been merely a minor blaze, without being considered too unimportant for record. As to the second, its fullest description, in (2), leaves little doubt that a major disaster was suffered. As to the conflict in dates: because of their subject matter, it is probable that (4) quoted from (3), and (5) from (4). (4) attempted to improve (3), which had given merely the cyclical characters, by linking these to the reign of the Empress, but through ignorance chose the wrong reign year. (5), noticing the discrepancy, and having to choose between two dates—the original 庚午 and the "15th of Suikō-tennō" supplied by (4)—decided that the latter was authentic, and provided it, therefore, with its proper cyclical characters, 丁卯. The problem here resolves itself, then, into a balance of the respective merits of the *Nihongi* and the *S.-t.-dembōkekki*. The former, a century or more earlier, was an official history of Japan. On the other hand, it is full of demonstrable inaccuracies. In the case of the death of Shōtoku-ishi, for example, its date is 621/2/5. Probably the best available evidence for this date is that furnished by the inscription on the rear of the Shaka Trinity on the altar of the Hōryūji Kondō, which work was completed in 623 as the result of a vow made by the Prince's consort and sons during his last illness. Here the date given is 622/2/22; and it is that date which appears in the *Dembōkekki*. In this instance, at least, the latter is more accurate than the *Nihongi*, so that the latter's apparent advantages become less impressive.

II. Evidence as to rebuilding:

7. *Kōfukuji-ryakunendaiki* 興福寺略年代記 (a history of the Nara temple Kōfukuji, down to 1576): Suikō-tennō, "21st year (613). The Prince Imperial built 造 Hōryūji." (Against authenticity, the late date of the source, and the fact that the record mentions no previous building operations; may be a garbled reference to the first erection, completed in 607).

8. *Kinsekki* 金石記 (a record of ancient inscriptions, etc., in Kyōto and Nara, made by Yashiro Rinchi 屋代輪池, investigator of old monuments for the Shōgunate, in 1793): "The temple tradition says that Prince Yamashiro-no-ōe 山城大兄王子 (Shōtoku's son) erected the Kondō and enshrined this image (of Shaka) within it, on behalf of his father, the Imperial Prince of the Upper Palace 上宮太子."

9. *Shichidaiji-nembyō* 七大寺年表 (history of the 7 great temples around Nara, from 682 to 802; old copy bears colophon saying it was copied in 1166, so original was earlier): "Wadō 1st year (708) . . . An Imperial command was issued to construct 造 Kanzeonji in Dazaifu, and also to 'make' 作 Hōryūji."

The three schools which insist on a general rebuilding give varying emphasis to these items of evidence.

The oldest, headed by Kita, insists on the superior authenticity of the official history (2). The destruction was complete, and (9) refers to the beginning of a serious attempt at reconstruction, under Imperial encouragement. Supplementary evidence is drawn from the *Hōryūji-garan-engi-narabini-ryūki-shizaichō*, the officially ordered history and inventory of temple properties, made in 747. As "history," this contains merely an account of the first founding of Hōryūji, and of the most generous donations made to it thereafter, so that there is no mention either of burning or of rebuilding. The inventory, however, states that certain images—the Kongō-rikishi, or Protectors, of the middle gate, and the clay figure groups of the pagoda—were additions of 711. This is taken as a proof of reconstruction being carried on at the time. Furthermore, the inventory fails to list one of the principal monastery buildings, the lecture hall; to Kita this indicates that the latter had not yet been erected by 747, through slowness of work.

The hypothesis favored by Ono sets aside all these direct references to burning and rebuilding, to lay chief emphasis on what seems to him an overwhelming historical probability. The temporary alliance between Prince Shōtoku and Soga no Umako, against a common enemy (see p. 3 above) had no effect on the next generation. The Soga grandson, Iruka 入鹿, acting in the position of king-maker, found that his plans for supremacy were hindered by the existence of one whole branch of the Imperial house, descended

from Shōtoku. He ordered their arrest in 643, and troops therefore descended on their residence, the palace of Ikaruga which Shōtoku had built east of Hōryūji. The princes fled into the mountains; the palace was burnt (thus the *Nihon-shoki*, Kōgyoku-tennō 2nd year, 11th month). After several days of hiding, the princes came down to Hōryūji to deliver themselves up, persuaded to self-sacrifice by the piety of their leader, Yamashiro-no-ōe. According to the *Dembōkekki*, (3), they entered the pagoda, prayed, and then strangled themselves with their wives. Ono believes that the temple also was burnt at this time. Both the texts speak of bright-colored celestial portents and heavenly music, which to the impious eyes of Iruka and his troops seemed only a black cloud; this must have been a cloud of smoke. As to rebuilding thereafter, the Hōryūji inventory records that in 648 a sustenance fief of 300 households was made over to the monastery, by Imperial order. This must have been to furnish funds for the building operations; and when the fief was withdrawn in 679, it must have been because the necessity for such assistance no longer existed, i.e. because the monastery had been rebuilt. To indicate the need for a complete restoration, from the ground up, Ono uses a quotation from the *Dembōkekki*, (3). That text, after narrating the mass suicide of Shōtoku's descendants, speaks of the retribution visited on the Soga clan (in 645), and then describes the many strange portents which were seen in the 3rd month of the year 壬辰 (this would indicate either 632 or 692, and so seems an error for 甲辰, i.e. directly after the death of the princes). It then continues:

10. "After the fire suffered by the temple of Ikaruga, the brotherhood were not able to settle on a site for the monastery 斑鳩寺被災之後衆人不得定寺地. Therefore priest Nyū 入師 of Pekche set himself at their head, and directed that they build 造 Hachiokadera 蜂岡寺 in Kazurano, and Takaidera 高井寺 in Kawachi. Three men together, priest Mon 圓師 of Pekche, priest Emmei 圓明師, and Shimoi-no-kimi Kazumono 下水君難物, built Miidera 三井寺."

The theory sponsored by Hirako and Aizu rejects this in summary fashion. None of Ono's texts actually says that Hōryūji was burnt by the troops of Soga no Iruka. The palace was burnt, but several days later the princes, coming from their retreat, went into the temple and entered the pagoda. Obviously there was no question of the palace fire's spreading; the "black cloud" was simply a figment of the pious imagination, to contrast the wickedness and blindness of Iruka with the blessed state of those who were able to see bright colored celestial banners. As to Kita's hypothesis, they protest that the *Nihon-shoki* is full of errors, of which this is one; the compiler, using some original record that the temple was burned in the 庚午 year, by mistake set the item down in the wrong cycle, in 670 instead of 610. The weightiest text is (3), the 9th century *Dembōkekki*, which dates the fire only by the cyclical characters 庚午, but places it in chronological narration before the Prince's death in 622. This school uses (7) as a possible indication of early rebuilding in 613, but believes that serious operations probably lagged until 622, when the illness and death of the Prince provoked the donation of the Shaka Trinity. The same impulse must have spurred the construction of a Kondō to house the images, then middle gate and cloisters, and finally the pagoda in the next decade. The chief actor in this exhibition of filial piety must have been the son most like his father in saintliness, Prince Yamashiro-no-ōe; some support for the theory here is furnished by the temple tradition recorded in (8). The donation of 300 households in 648 was not for building purposes, but to make up for the complete loss of financial support which the temple must have suffered with the wiping out of Prince Shōtoku's descendants en masse 5 years earlier. As for the note concerning the "making" of Hōryūji in 708 (9), Aizu demonstrates that the character used, 作, can mean "to continue operations" quite as well as "to begin operations"; and that the reference, therefore, concerns a general renovation and enlargement rather than any new rebuilding. In the case of the other temple mentioned in the order, Kanzeonji, construction had been begun a generation earlier.

The minor divergence between the fire dates proposed by Hirako and by Aizu—610 and 607 respectively—springs from the latter's use of one additional text. The *Dembōkekki*, as quoted above (10), tells how the monks of Ikaruga scattered after the burning of their temple, and that Miidera was then built. Both Hirako and Aizu have held that the fire here referred to must have been the only one mentioned previously in the text, that of quotation (3), even though the two are separated by a chronological account reaching as late as 645. The *Dembōkekki* at its very end, immediately after the building of Miidera, clearly abandons a strict chronological sequence; it is not unreasonable to suppose that the break in narrative continuity goes back still further, ending the main theme with the downfall of the Soga, and beginning

another, unrelated in time, with the dispersal of the monks. The Miidera thus mentioned was unquestionably the temple whose orthodox name is Hōrinji, a short distance to the north-east of Hōryūji. A history of the founding of this temple exists, the so-called 御井寺勸錄寺家資財雜物等事, incorporated into various late Heian or Kamakura period biographies of Shōtoku like the *Shōtoku-taishi-denshiki* 傳私記, written at the mid 13th century. In this the statement is made that its establishment was "320 years earlier than the present time, Enchō 6th year 戊子 (928)"—i. e. in 608. Aizu places chief reliance on this date, and therefore sets the burning of Hōryūji in 607, the year given by (4) and (5). That was the very year in which the latter (Hōryūji) was first completed, according to the inscription on its original main icon, the Yakushi. Fortunately a quotation exists, stating that Hōryūji was dedicated in the 2nd month, 15th day (in the *Kenshin-tokugyō-kōkeshō* 顯真得業口決抄 by the Hōryūji priest Shūgon 俊嚴, -1254. By error, the 31st year is given instead of the 11th, of Empress Suikō, but the cyclical characters are those for 607, 丁卯). The life of the original establishment was thus 2½ months.

Confused and conflicting though all this mass of literary evidence may be, it at least seems to agree that Hōryūji was burnt and rebuilt some time during the first century of its life. The school, headed by the late Professor Sekino, which has denied any rebuilding, possesses no such body of historical citations to back up its contention. The lack has been met on the one hand by attempting to minimize the recorded fires. Even the crucial phrase in (2), "not one building was left" 一屋無餘, has been re-interpreted. The characters normally used for important monastic buildings are 堂 or 宇; 屋 is usually reserved for such minor structures as monks' dormitories, and therefore it must have been merely the living quarters which were completely destroyed. The strength of the Sekino theory, however, lies in the arguments which have been drawn from the actual remains at Hōryūji, rather than from texts. Most of these have been directed against Sekino's first adversary, Kita. The style of the Hōryūji remains—buildings, images, paintings, banners, and canopies alike—is clearly a homogenous one, closely linked to practises of the Six Dynasties period in China. In images, at least, this "Asuka" style is unquestionably tied down by dates to the first half of the 7th century. To suppose that Hōryūji was rebuilt in the early 8th century means that such an archaic style was still being practised in Japan three generations after a direct contact had been established with T'ang China—and so with a new style very different from that of the Six Dynasties. It means that the archaic manner was being practised in Japan within a generation of the appearance, around Nara, of buildings in full T'ang fashion, completely altered in every detail. In the early 8th century the Hōryūji style was so thoroughly old-fashioned that its persistence could be explained only as a scrupulous imitation of the way the buildings had been put up a hundred years earlier; a situation very hard to believe. In the present Hōryūji Kondō, again, are a large number of objects in the Asuka manner: the Yakushi of 607, the Shaka Trinity of 623, the Shitenno or Four Heavenly Kings, which can be dated around 650, the very early Tamamushi shrine, complete with large thrones and wooden canopies above; how is it possible to imagine that all of these, particularly the canopies, could be salvaged from a fire in the middle of the night, which must have been started by lightning? In the past, very little investigation by digging has been possible in the monastery grounds; but the laying of a pipe-line in 1925 disclosed no traces of any burning around any of the oldest buildings. As to the absence of any mention of a lecture hall in the temple inventory of 747, this is best explained as a copyist's error. The list reads:

"One Kondō, 2-storeyed; 47.5 ft. long, 36.5 deep, pillar height 12.6 ft.

"One refectory, Jikidō 食堂; 120 ft. long, 57 ft. deep, pillar height 15.9 ft."

In such lists, orthodox practise always sets the lecture hall after the Kondō. The dimensions given would fit a lecture hall perfectly; some copyist, it is explained, has merely written 食 for 講.

The greatest strength of Sekino's position has lain in his study of the dimensions used at Hōryūji. This investigation has proceeded from two assumptions: that the dimensions of all larger intervals were calculated as whole numbers, when built; and that the scale used at the time was the so-called "Koma shaku" 高麗尺, a measure borrowed from Korea and by the Koreans borrowed from North China of the Six Dynasties period. Other indications have shown that this "Koma" foot was about 1.176 times the present shaku in length. The existing dimensions of the earliest buildings at Hōryūji, transposed into "Koma" terms, have thus been resolved by Sekino into a series of whole numbers or simple fractions (with a modest allowance on one side or another for variations in the scale used, which Sekino has permitted

by a system of averaging). Similar studies made in Korea have yielded similar results for temple ruins of the late 6th and early 7th century (see below, p. 31 and note 57). Now the new Taika constitution adopted in Japan at the middle of the 7th century outlawed the "Koma" measure and (according to Sekino) substituted for it that in use in the T'ang dynasty. The change in the scale used is shown in Korean monuments of the later 7th and 8th (where perhaps a similar law was promulgated). It is Sekino's contention that a Hōryūji rebuilt in the early 8th century would have had to use the legal "T'ang" foot—about 0.98 times the present. The existing Hōryūji dimensions, calculated on this basis, cannot be made into convenient numbers by any sort of manipulation. Therefore the existing Hōryūji nucleus pre-dates the Taika reform.

The study of the existing Hōryūji has yielded evidence for the theories of rebuilding as well. The trenches dug for the pipeline disclosed a large amount of calcined earth and burnt tile fragments to the north-east of the cloister nucleus, around the present refectory. Kita believes that this was the site of the original foundation, and that the text of the *Dembōkekki*, "after the fire . . . the brotherhood were not able to settle on a site for the monastery," indicates that the original location was abandoned. Furthermore, in 1926 it was discovered that there was a large cavity at the base of the central pillar of the pagoda, caused by the rotting away of the timber. The foundation stone thus exposed, yielded from a socket what must have been the original objects placed there when the pagoda was first built: precious stones in a bronze bowl, a silver relic container, and a mirror. The latter is a familiar Chinese type, decorated with a pattern of grape-vines and animals. The type is today called T'ang; Kita believes that such a mirror could not have existed in Japan as early as 607, and that its presence argues rather an 8th century date. Aizu, supporting his pagoda date in the 630's, claims that there is nothing to prove that such mirrors were originated at any definite time in China; and that anyway, Japanese students had already returned from the T'ang in 632, so that a possibility of transmission existed.

As to the contents of the Kondō, Kita argues that the proportion of 7th century objects which actually survived the fire is shown by the inventory of 747. The latter lists some 167 items; of these only three, the Shaka, the Yakushi, and a set of gilded bronze banners, were surely pre-670, and only seven more surely of the Wadō period in the early 8th. The other "Asuka" style objects now on the altar were probably transferred there later, as is now known to have been the case with the Four Heavenly Kings. Aizu believes that the original Buddha hall dedicated in 607 must have been considerably smaller than the present. Its only known icon was the quite small, single Yakushi, in an age when images were normally large in proportion to their enclosures. He claims that the high pedestal which now raises the Yakushi to the same height as the Shaka Trinity was added in the 620's, to accommodate the original icon to the scale of its companion and of the new, larger Kondō.

The pipe-line trenches of 1925 have disclosed ornamental tile-heads in large numbers, which divide into two categories stylistically. Proponents of rebuilding claim that the more elaborate are later and the simpler from 607; Sekino claims that the distinction is merely one of use, the simpler being placed on minor buildings. It has been claimed that the central column bases on the south side of the Kondō show signs of re-use; i. e. that originally they possessed each a round projection to set into the under side of the timber, which was cut away—but not entirely—when they were adapted for use in the present building.

Sekino's general stylistic argument, the presumption of a homogenous "Asuka period" style including both art and architecture, which evolved into a new "Hakuhō" style after the middle of the 7th century, has been vigorously countered. Fairly good historical evidence exists to prove that the neighboring pagoda of Hōkiji, admittedly a very close cousin to that of Hōryūji, was not erected until after 685. (See Section C, below). From this, Kita has concluded that no "Asuka" style of architecture remains, all evidence being from the "Hakuhō" period. Aizu's conclusion—based on a dating of the Hōryūji pagoda in the 630's—is that there was no very marked change from late "Asuka" through "Hakuhō." He cites certain details which show a difference—and perhaps an advance—in the Hōkiji and Hōrinji pagodas over that of Hōryūji: a greater sophistication in the contours of bracket forms, and in particular a lesser degree of column entasis (which seems to make these examples transitional between the very marked entasis of Hōryūji and the slight swelling normal in the 8th century). He supposes that the deaths of Shōtoku-taishi

and then of the Empress Suikō were followed by a period of comparative reaction against their fervent enthusiasm for the Buddhist faith; so that few new monasteries were built during the middle of the century, and it was only toward the end, in the reign of Temmu-tennō, that a marked revival of patronage began.

Sekino's discovery of a basic "Koma" foot measure in the Hōryūji dimensions was first met by the supposition that rebuilt halls would naturally be set up on their old stone column bases, in spite of any official promulgation of new measures. Later, the whole basis of Sekino's chronological division between "Koma," and "Tang" measures was denied by Miura 三浦 (in *Rekishi-chiri*, 歴史地理, vii/7, 1905), through evidence that the former was not formally superseded until 709, and that the whole problem of early Japanese foot measures is too confused to permit more than guess-work. It has remained obvious, however, that a definite change in measures used in architecture took place from the 7th to 8th centuries; on the Kondō altar, the "Koma" foot seems to have been used for the platforms of the two main icons, Shaka and Yakushi, and for the Tamamushi shrine, while the "Tang" foot first appears on the 8th century Tachibana shrine. Aizu has found that the pagodas of Hōkiji and Hōrinji work out satisfactorily with neither, and thus suggests that they embody some transitional system appropriate to a comparatively late 7th century date. In Korea, the comparison of dimensions from sites whose history is comparatively well established, seems to show that the change had been accomplished as early as 637. In Japan, the ruins of Yamadadera apparently concur, for a date in the 640's (see p. 26 and note 49).

It is difficult and hazardous for a non-Japanese to attempt any choice among the items of evidence assembled by so many experts. If any tentative decision is to be made, however, it will be achieved first by discarding the least impressive of the theories, that proposed by Dr. Ono. Only the weakest sort of circumstantial evidence supports the idea of a destruction by fire in 643. Ono's best quotation is the phrase in the *Dembōkekki* which follows (at a considerable interval) after the account of the suicide of the princes at Ikarugadera (10): "After the fire suffered by the temple of Ikaruga, the brotherhood were not able to settle on a site for the monastery." I have suggested that the whole last portion of this text seems a departure from strict chronological narration. That was also the interpretation adopted by the author of the *Shōtoku-taishi-denreki*, compiling his biography in 917. The *Denreki* follows the sequence of the earlier work, adding further details, and—as this instance shows—attempting to clear up obscurities. Instead of saying merely "After the fire, etc.," therefore, it interpolates the explanatory sentences, "Moreover it is said that in the 庚午 year, 4/30, at midnight, there was a fire at Hōryūji; although this is not recorded in the histories. This year was the 15th of Empress Suikō. After the fire suffered by the temple of Ikaruga, etc. . . ." The source of the "it is said" must have been the *Dembōkekki* again, in its one earlier reference to a fire (quotation 3 above). The later compiler quite reasonably assumed—as I should—that the two references stemmed from a single occurrence, and so combined them in his new edition. As I have pointed out, his attempt to make the date more precise by adding a reign year to the cyclical characters, led him into an error of three years.

The late date proposed by Kita balances an inherent improbability by his single strong point, the reputation of the *Nihongi* as an official history. We know that the monastery of Yakushiji was rebuilt in the 720's at Nara in a style noticeably less advanced than that followed by the other establishments of the new capital; the archaism being explained by the fact that it seems to have been a close copy of a predecessor erected at Asuka in the 690's (see p. 46 and note 80). This is a surprising phenomenon, in an age bursting with fresh energy and ambition; how much more surprising to assume that Hōryūji was rebuilt in the early 8th century on the far more primitive lines of a predecessor a century out of date, rather than a generation only. If the *Nihongi* were infallible, it might be possible to stomach the idea of so extraordinary a fidelity to the past. But the *Nihongi* can be proved wrong even in so crucial a point as the date of death of the most famous of Imperial princes. To assume it wrong again in the date of the Hōryūji fire would require merely a common and easily made error—the attribution of a year noted only by cyclical characters, to the wrong cycle.

Aizu's theory of a fire in 607 instead of 610 seems equally unjustified. One can readily imagine that the *Nihongi* erred once, by the wrong cycle of 60 years; it is much less reasonable to assume some sort of double error. His choice of the earlier date is based entirely on the Hōrinji "history," a document which he himself considers acceptable only in part. The latter's text says, "From Enchō 6th 戊子 (928),

this was in all 320 years before." A comparable statement is given in the history of Yakushiji, related in the early 11th century *Shōji-engishū* (*D-n-bukkyō-zensho*, *Jishi-sōsho* i, p. 18): "From Yōrō 2 (718) down to Chōwa 4 (1015), 299 years have elapsed." Normal reckoning—the sort used by Aizu with his "320 years" would make this only 297. We thus see the possibility in such computations, either that a different system of reckoning from the normal was used, or that the monkish compiler was apt to be weak on arithmetic. Either permits the assumption that the "320 years" might give a date of 610 or later; which would permit the "history" to be an acceptable record of the building of Hōrinji after a Hōryūji fire of 610.

It is the latter date, therefore, which seems to me to furnish the most satisfactory explanation of the Hōryūji fire; the date given by the 9th century *Dembōkekki* (which in reporting Prince Shōtoku's death can be proved more accurate than the earlier *Nihongi*). Rebuilding may very well have involved an increase in size (*qua* Aizu) and the choice of a preferable site elsewhere (*qua* Kita). There seems to me no way to fix a more precise date for reconstruction than the first half of the 7th century.

One more textual reason for preferring a fire date of 610 to one of 670 is furnished by the temple Hachiokadera. This was one of the establishments "built" by the Hōryūji monks after the fire. Its name appears in the Hōryūji inventory as one of the seven founded by Empress Suikō and Prince Shōtoku, under the date 607; the *Nihongi* (Suikō-tennō 11/11 [603], p. 376) states that it was built by one Kahakatsu, Hata no Miyakko, to enshrine a Buddha image given him by Shōtoku. It is a natural presumption that the Hōryūji monks assisted in the completion of the work in 610 or later; not in 670.

B. *Hōrinji*: the quotation given above (10) from the 9th century *Dembōkekki* states that "Miidera" (i. e. Hōrinji) was built after the Hōryūji fire, presumably by the latter monastery's temporarily homeless monks. This furnishes termini between 607 and 670, according to the interpretation given to the burning of Hōryūji. A second text is more definite, the history of Hōrinji mentioned in Appendix I A as being included in the 12th century *Shōtoku-taishi-denshiki*. This reads as follows: (the text is given by Aizu, *op. cit.*, p. 60):

"The said temple: in the august reign of the Empress who ruled from the Oharida Palace, the year being 壬午 (622); the Prince Imperial of the Upper Palace, being at the time in ill health, prayed for recovery, and thereto commanded his son, Prince Yamashiro-no-ōe, and Prince Yoriyoshi to begin the erection of this temple. With respect to the court noble Takahashi 高橋朝臣, supervisor of the temple's affairs; Kashiwade no Miho no Iratsume 膳三種娘 was the Prince Imperial's wife; after the Prince Imperial's demise, this wife became the chief patron (of the temple); the aforesaid Court noble Takahashi was descended from her. From Enchō 6th year, 戊子 (928), this was in all 320 years before."

Judgment on this text has followed the preconceived hypotheses of the critic. Both Kita and Sekino have accepted it as genuine. Both have supposed that Hōrinji was begun shortly after Shōtoku's death in 622, the "320 years" being merely some sort of error in transcription. Kita, having to accommodate this theory to the quotation from the *Dembōkekki*, has imagined that work lagged, and was entirely halted when the descendants of Shōtoku were wiped out in 643; and that it was prosecuted for a second time, to completion, after the Hōryūji fire "in 670." Sekino, disregarding the *Dembōkekki*, has claimed that the work was completed before 643.

Aizu, having to accommodate the excerpt to his theory that Hōryūji was burned down at a very early date, is constrained to deal more critically with the Hōrinji "history." Part of it he thinks is genuine, and the rest the result of a desire to be associated with the most famous figures of early Japanese Buddhism. The key to the problem is the figure of the wife who acted as chief donor after the Prince's death. The name given suggests that of the favorite among Shōtoku's four consorts, Kashiwade no Hokikimi no Iratsume 膳善岐岐美娘; but it is known that this lady died one day before her lord. Aizu's genealogical researches have indicated that the person named in connection with Hōrinji was actually the sister of this chief consort, but was herself married not to Prince Shōtoku, but to his brother, Prince Kume 久米王. The crucial link is given by a textual comment to a lost work, the *Jōgūki* 上宮記, which traditionally had been written by Shōtoku himself; the excerpt being quoted in the Kamakura period. *Shōtoku-taishiden-zakkommon* 難勘文. Here it is stated that Prince Kume married the younger sister, Kashiwade no Hiroko 比里古, and had by her a son, Prince Takahashi 高橋王. The difference between the given names may be passed over, since at the time the same person might be referred to in several ways. Prince Kume died as a

young man in 603; Aizu supposes that his widow and son went to live near her sister (then in Shōtoku's palace of Ikaruga), and through the latter's example eventually made over her mansion into a temple, the future Hōrinji—with the assistance of monks from the recently burned Hōryūji—in 608, 320 years earlier than 928. Everything in the "history" about Shōtoku's death-bed command, Aizu believes to be a fabrication designed to give the temple a more illustrious origin. The same sort of wishful thinking transformed the comparatively obscure wife of Prince Kume into the well-known consort of Prince Shōtoku.

The existing Hōrinji pagoda is stylistically almost indistinguishable from that of Hōkiji, linked by textual evidence to a late 7th century date (Appendix I-C). Aizu therefore assumes that the original foundation consisted merely of a made-over palace; that this was gradually superseded by a formal monastery layout; and that the pagoda (as was often the case) was set up last of all, an appreciable time after the rest.

Ono accommodates the building of Hōrinji to his theory that Hōryūji was burnt in 643, by assuming that the former (begun after 622) was largely completed in the 640's.

C. *Hōkiji*: Chief literary evidence for erection is furnished by the text of an inscription which is supposed to have been set on its pagoda spire, or *rōban*. Aizu has assembled evidence of the history of this spire. In 1081 the inscription was copied down, by Imperial order, and its text sent to the capital. In the period 1109-1129, the whole upper part of the spire—the so-called *kurin*, mast, disks, and finial—was stolen. At that time the two-part base of the spire was taken down to be kept in the Hōryūji storehouse. In 1233, the domical part of the base, or *fukubachi*, was melted down to make a bell; in 1262 the pagoda was repaired, using the old square base, or *jiban*, and a new spire. No inscription is visible today; it is unlikely that anything so precious would have been melted down with the *fukubachi*; thus it may be assumed that the inscription was on the part stolen in the early 12th century. The text had already been copied, however, and what purports to be the original wording appears in several works from the Kamakura period on. The oldest and most authentic version Aizu believes to be that contained in a 13th century biography of Prince Shōtoku, the *Shōtoku-taishi-denshiki*. Certain odd and ungrammatical details of verbiage which make translation difficult he considers to be copyist's errors, of the sort possible only in "grass" writing where two characters may mistakenly be combined.

"The Heir Apparent of the Upper Palace, the Imperial Shōtoku, as he was at the point of death in the year 壬午 (622), 2nd month, 22nd day, expressed to Prince Yamashiro-no-ōe his august prayer, commanding that the buildings of his palace of Yamamoto 山本宮 (this should probably read Okamoto 岡本) should forthwith be made over into a temple, and that (the latter) should be endowed with 12 *chō* of fields in Yamato, and with 30 in Omi. Coming to the year 戊戌 (638), the 'bishop' Fukuryō-sōjō 福亮僧正 in reverence made an image of Miroku and erected a "golden" hall, out of the august apportionment of the Imperial Shōtoku. Coming to the year 子乙 (685), the 'bishop' Eshi-sōjō 惠施僧正, bringing the august vow to fulfilment, erected halls and a pagoda. Finally, in the year 丙午 (706), 3rd month, the spire was made." (Aizu, pp. 25, 31.)

Although the last three dates are given only by cyclical characters, there can hardly be any question which cycle is meant. Eshi was made a 'bishop,' or Sōjō, in 698, but of course held the title when the inscription was written. Fukuryō, according to the 14th century collection of Buddhist biographies, *Genkō-shakushō* 元亨釋書, was an immigrant from south China.

Approval of this text, also, has depended on the critic's ability to fit it into his theory about the Hōryūji fire. Kita is obviously pleased by the lateness of its dates; Sekino has naturally rejected it as a clumsy, late forgery, chiefly because of its phraseology. Some of his objections fall under Aizu's "copyist's errors." Others concern the use of a series of honorifics—崩, 勅, 皇, etc.—in connection with Prince Shōtoku which orthodox usage normally reserves for the ruler alone. Here Aizu has demonstrated that in the 7th century no such definite limitation existed as later. One of Sekino's chief points is that there is good reason to believe that Hōkiji had been founded at the very beginning of the 7th century, so that the whole story linking it to the 620's must be false. The Hōryūji inventory of 747 lists seven establishments, under the year 607, which were built by Empress Suikō and Prince Shōtoku, beginning with Hōryūji itself (*Z-gunshoruiju*, p. 156). Among the seven is a certain "nunnery beyond the pond," Ikenoshiri-no-amadera 池後尼寺, which for a thousand years has been identified with the nunnery Hōkiji.

At this point, the whole problem of the relationship between Hōryūji, Hōrinji, and Hōkiji becomes to

the outsiders almost unbearably irritating. The identification with Hōkiji goes back at least as far as the 10th century *Shōtoku-taishi-denreki*, and has been repeated ever since. On the other hand (assuming Hōryūji, or the site of Shōtoku's palace, as a place of origin), it is the quondam nunnery *Hōrinji* which lies beyond the only existing pond, and it is the neighborhood of *Hōrinji* which is known as "Ike-no-shiri" 池の尻. The pond, now called "Katana-ike" 刀池 must be the same as that which the "history" of *Hōrinji* mentions as forming the southern limit of the temple grounds (cf. Aizu, p. 59, 99), which then had the name "Kata-no-ike" 鹿田の池. The neighborhood of *Hōkiji* is known as "Shin-ike-no-shiri" 新池の尻, "new beyond-the-pond," which suggests that its name was merely imitated from that of the other, with the addition of "new" 新 to distinguish between the two. There is no pond of any size near Hōkiji today. Aizu suggests that the close proximity of the two nunneries to each other, their almost identical buildings, and their closely related histories must have made it extremely easy to confuse the two. He cites instances of such amalgamation in a work of the early 9th century, and implies that the whole tradition linking Hōkiji to the inventory's "nunnery beyond the pond" goes back to a similar error in the 10th century *Denreki*.

Aizu's dating—Hōryūji first laid out in 607; Hōrinji begun in 608; Hōkiji begun after 622—may have some stylistic verification. The first two, closely linked, by this hypothesis, in time, have the same placing inside the courtyard, Kondō and pagoda on east and west respectively. At Hōkiji, supposedly a generation later in its layout, the placing is reversed; and the parallel to this is found at Kanzeonji, which was begun in the 660's. See note 47.

II

GRAND MAIGRE FEAST AT K'AI-YÜAN-SSU:

(*D-n-bukkyō-zensho*, *Yūhōden-sōsho* i, p. 182.)

(K'ai-ch'eng 3/11/8 [838 A.D.]) "On the eighth—it being a state-(appointed) day of anniversary prayers—accordingly contribution of 50 *kuan* of cash (1000 each, 1 tael of silver) was made to K'ai-yüan-ssu, to provide a maigre feast for 500 monks. At dawn the monks assembled en masse at this temple, and ranged themselves on seats within the east, north, and west aisles. At the *ch'ên* hour (7-9 a.m.) the Minister of State (Li Tê-yü) and the Commander-in-chief entered the temple (precincts), and made their way to the great gate. There they (alighted from their conveyances), stood side by side, and then went in slowly on foot, with soldiers drawn up in front and back and on both sides as a bodyguard, and the civil officers of the district followed after them. They proceeded (in this way) to the foot of the lecture hall platform and then separated, the Minister of State going to the east and the Commander-in-chief to the west, each entering a tent shelter on his respective side. There they spent several minutes, changing their footgear and washing their hands, and then re-emerged. At the front of the hall there are two stone bridges. The Minister of State mounted by the eastern and the Commander-in-chief by the western; then both turned and came together from east and west, to meet at the center doorway of the hall. There they sat down and worshipped the Buddha; this done, they took up their places at the eastern and western doorways of the hall (respectively), each having several tens of monks standing with him, and each holding a lotus blossom and a jewelled banner.

"A monk struck a gong, and chanted the general formula of humility, adoration, and steadfast devotion to the Three Treasures. This being completed, the Minister of State and the Commander-in-chief rose to their feet and took incense vessels. The district officials ranged themselves behind them, distributing censers. Then the two lines marched to east and west. The Minister of State proceeded eastward, holding a flower banner; the monks who led the way chanting in unison the two Sanskrit *gathas* (celebrating) the marvellous body of the Tathāgata. First (after these) came an old priest of great holiness, and then the soldiers following as a bodyguard. They went to the foot of the cloister corridor eaves; and all the monks went through the incense (ceremony). This being completed, they turned around and went back by the same route to the hall, chanting uninterruptedly in Sanskrit. The Commander-in-chief went through the incense (ceremony) on the west with the same forms as those observed on the east. (The two) came back to

their starting-points at the same time; and at that moment the mingling of voices in the chanting on east and west was most wonderful.

"(During all this) the hymn-leader had not moved, but stood alone striking the gong. At a pause in the Sanskrit chanting, he again intoned the formula of adoration and steadfast devotion to the Three Treasures. The Minister of State and the Commander-in-chief both sat down at their original places, each with two incense burners which he had received at the time of the incense ceremony. An old priest of great holiness, Yüan-ch'êng Ho-shang, read the prayer for the occasion. That being completed, the hymn-leader intoned the stanzas praising the gods, the *nagas*, and the rest of the Eight Orders of Existence, and told of the beauties residing in the awe-inspiring Imperial ghost; at the end of each phrase repeating the formula of adoration and steadfast devotion to the Three Treasures. The Minister of State and the various civil officers rose together and worshipped the Buddha three or four times with chanting.

"Then all went their ways. The Minister of State and the rest, led by soldiers, proceeded to the great hall behind the (lecture) hall and went inside to partake of food. Five hundred assembled monks partook of food in the cloister corridors; their numbers were determined by the sizes of the temples (from which they came), a large temple (sending) 30, a medium-sized temple 25, a small temple 20; and each of (these groups) had its place in long rows"

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- Yung-ning-ssü, temple, C: 37-38, 40-41, 91; note 65
- Yüan-miao-kuan, Taoist monastery, C; San-ch'ing-tien: 81, 233, 235, 238; notes 133, 406.
- Yün-kang, cave temples, C: 35, 69, 80, 82, 91, 101, 103, 109, 116, 122; notes 114, 171, 187
- Zenkōji, temple, J: 266; note 460
- Zuiganji, temple, J; main hall: 275, 293; note 511

PLATES



Fig. 1. Izumo shrine: the sanctuary, in *Ōyashiro-zukuri* style.



Fig. 2. Kyōto, Yoshida-jinsha; minor shrine sanctuary in *Shimmei-zukuri* style.



Fig. 3. Harvesting shelter in *Tenchi-gongen-zukuri* style.



Fig. 4. Peking, Forbidden City: Ch'ing dynasty Imperial audience.

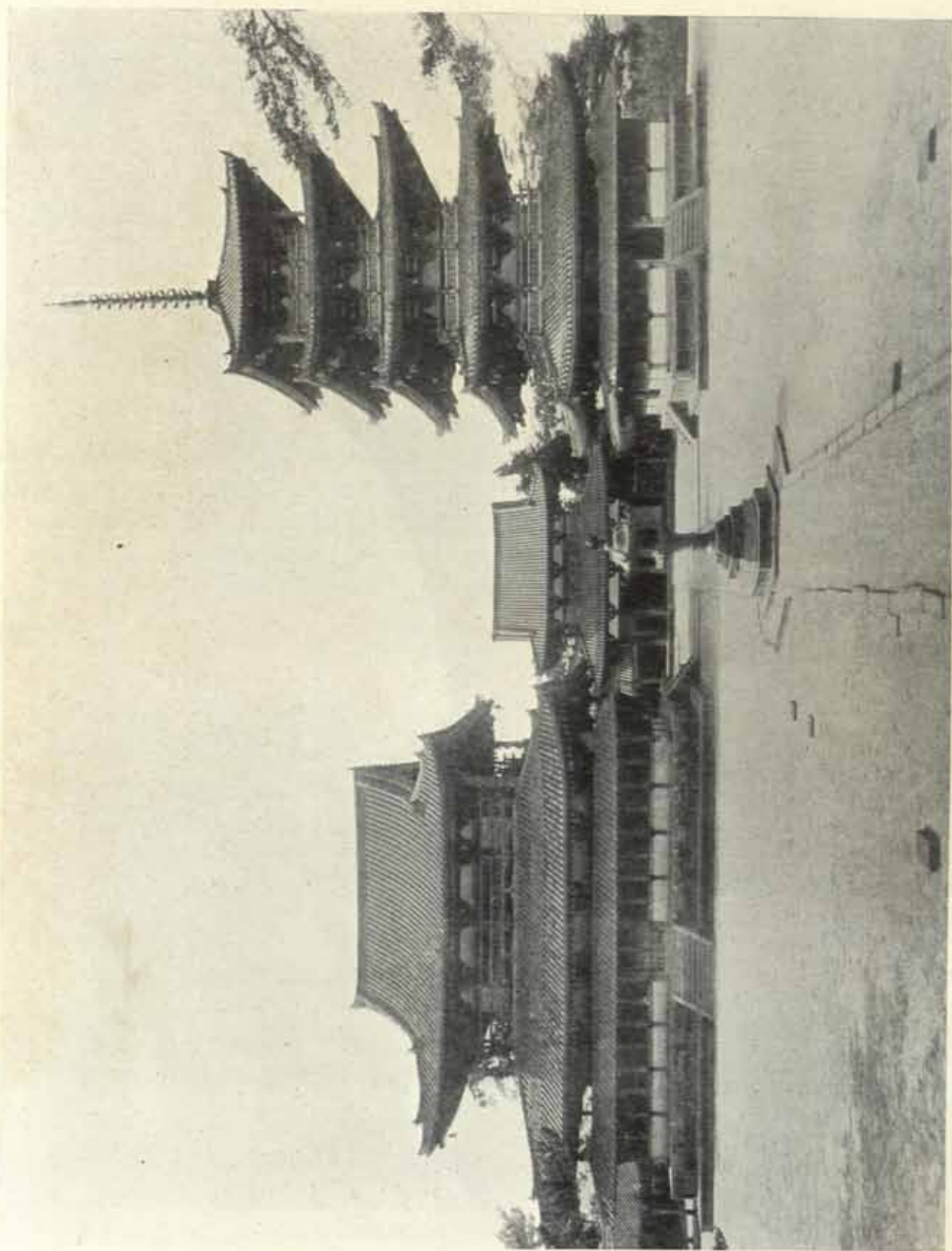


Fig. 5. Hōryū-ji: the nucleus of original buildings, "golden" hall, middle gate and corridors, pagoda.



Fig. 6. Hōryūji middle gate, Chūmon.



Fig. 8. Hōryūji refectory complex, Jikidō and Saiden.



Fig. 9. Tōshōdaiji lecture hall, Kōdō.



Fig. 7. Hōryūji *sūtra* repository, Kyōzō.

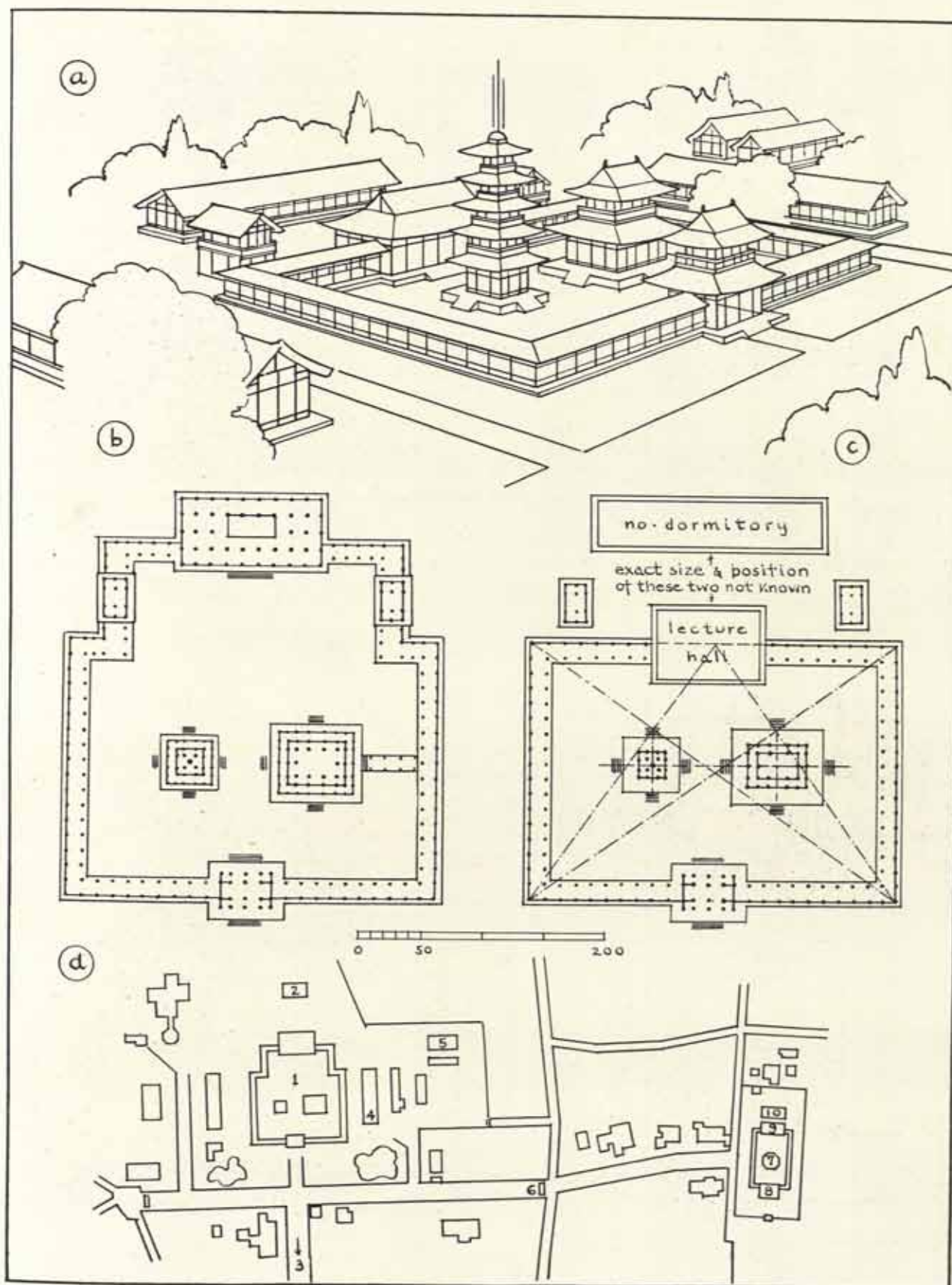


Fig. 10. Hōryūji: (a) bird's-eye reconstruction of original nucleus; (b) existing nucleus plan; (c) original nucleus plan; (d) existing general plan; 1, courtyard nucleus; 2, Kaminomidō; 3, to great south gate; 4, Shōryōin; 5, refectory complex; 6, great east gate; 7, Yumedono; 8, Yumedono raidō; 9, Edono and Shariden; 10, Dempōdō.

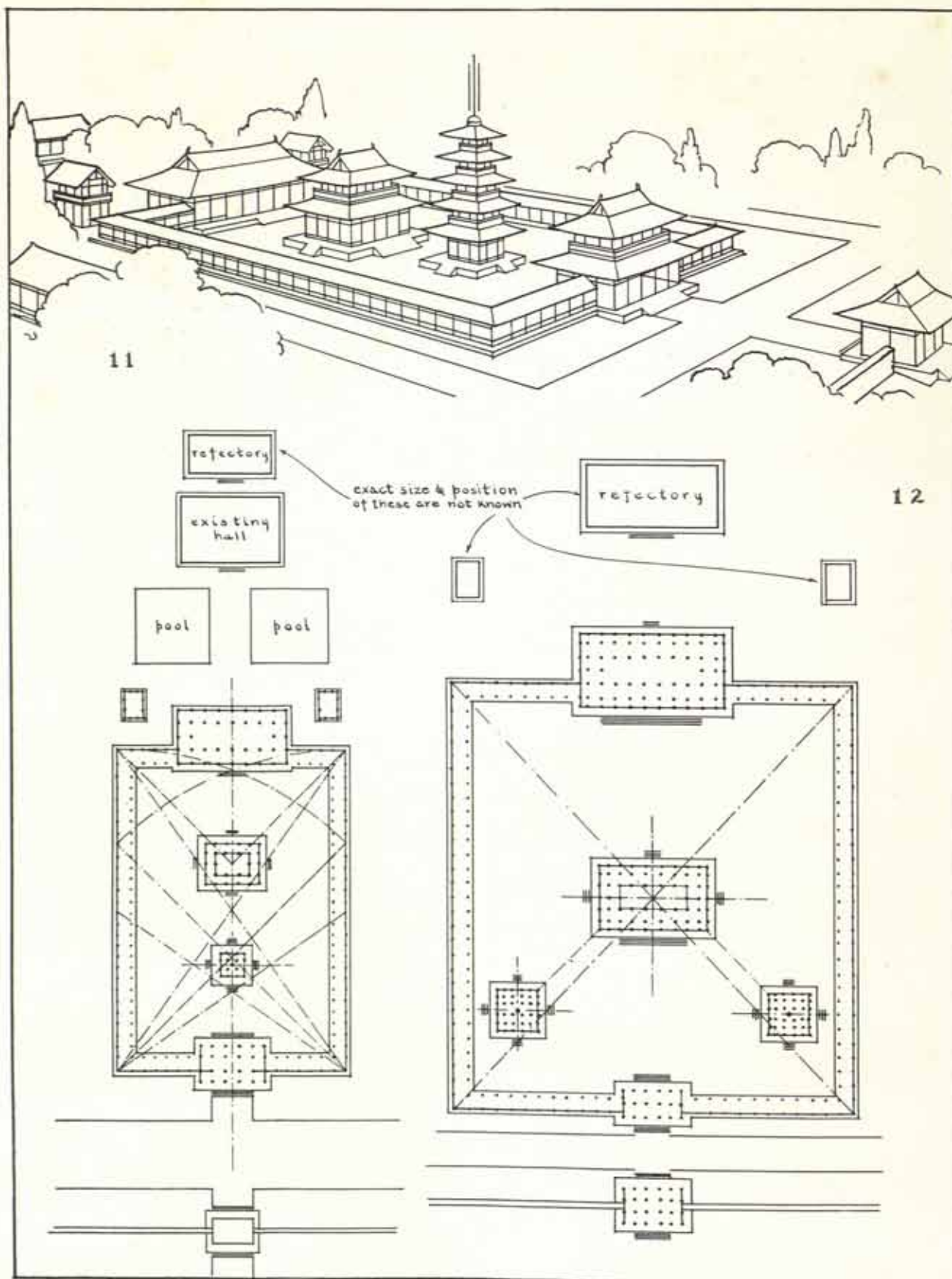


Fig. 11. Shitennōji, bird's-eye and plan reconstruction of original nucleus.

Fig. 12. Yakushiji, plan reconstruction of original nucleus.



Fig. 13. Yakushiji, old view (from an Edo period print).

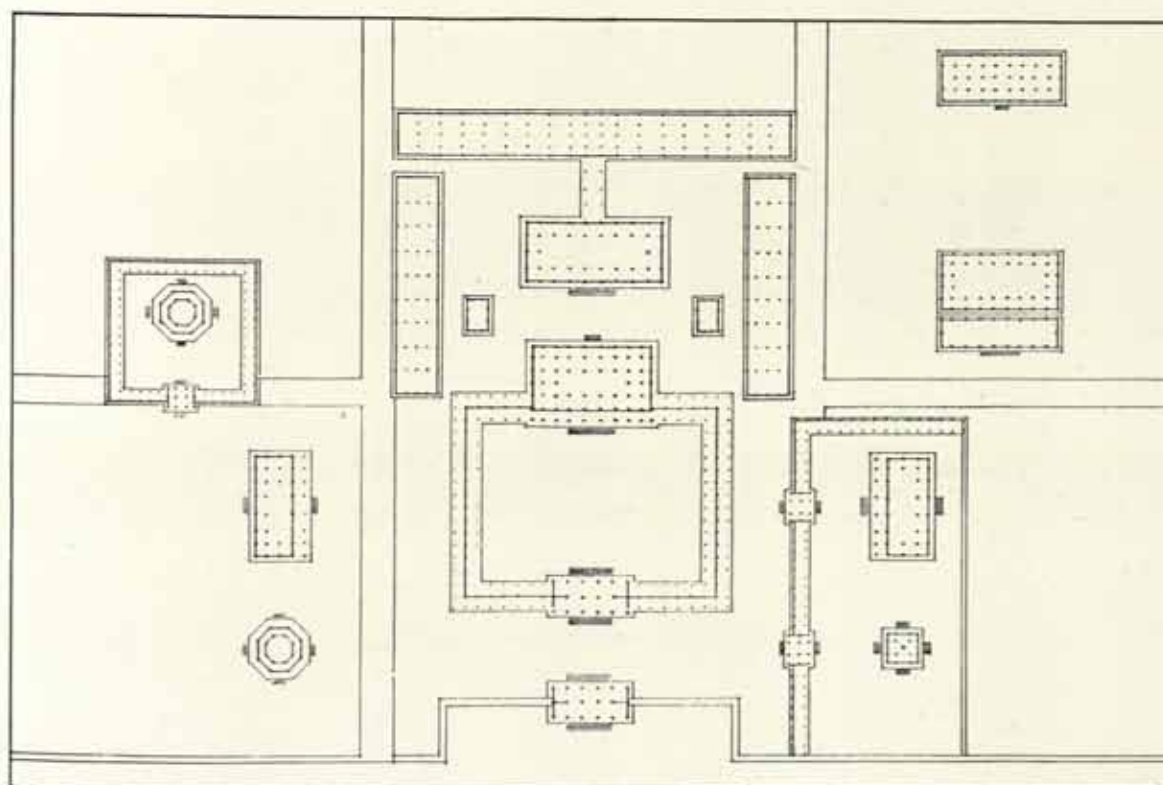


Fig. 14. Kōfukuji, plan reconstruction of original.

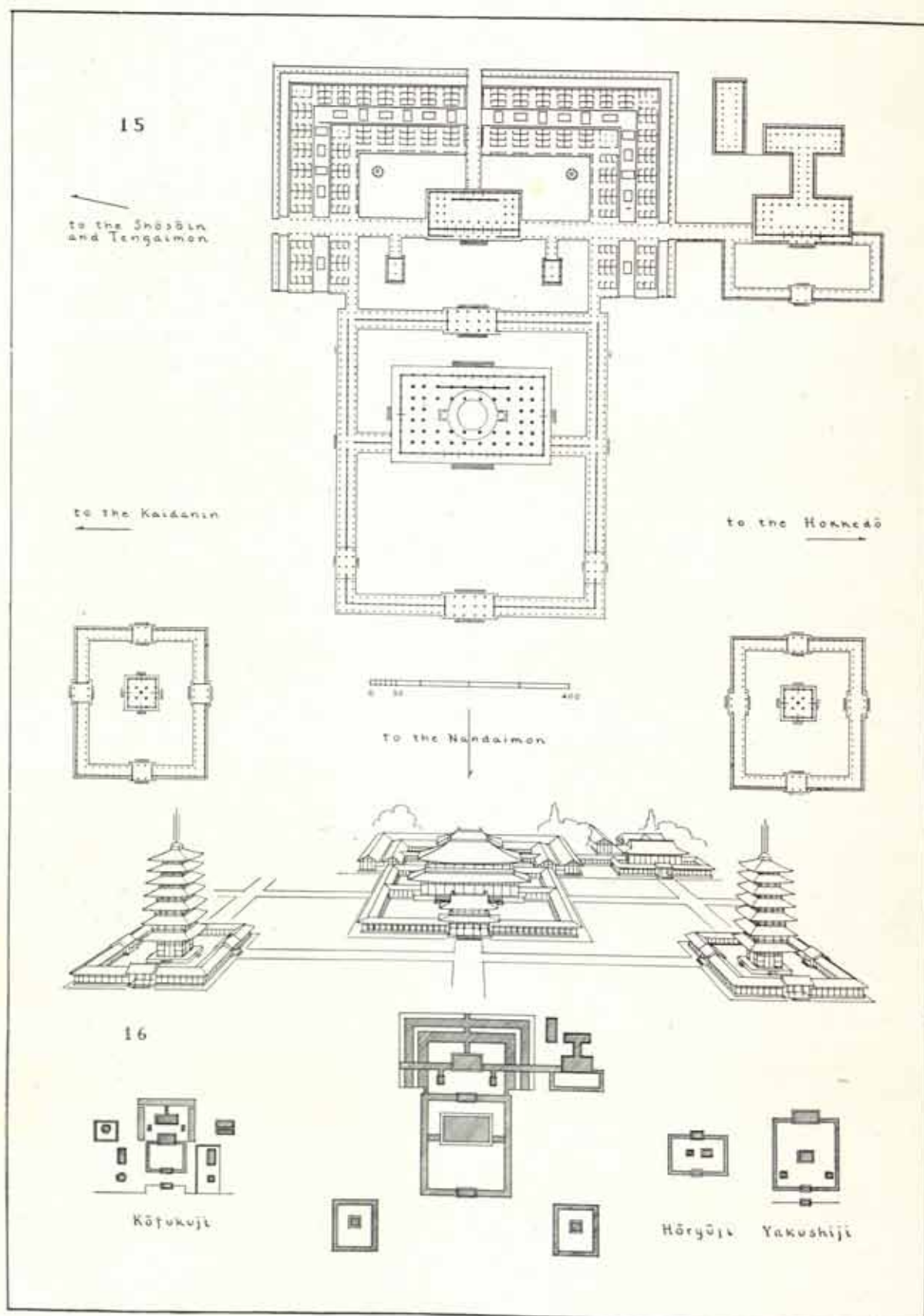


Fig. 15. Tōdaiji, plan reconstruction of original.

Fig. 16. Diagram of increase in monastery scale, from seventh to eighth centuries.



Fig. 17. Hōryūji "golden" hall, Kondō, interior.



Fig. 18. Kung-hsien cave temple, central shaft with icons.



Fig. 19. Yün-kang cave temple, central rock-cut pagoda.

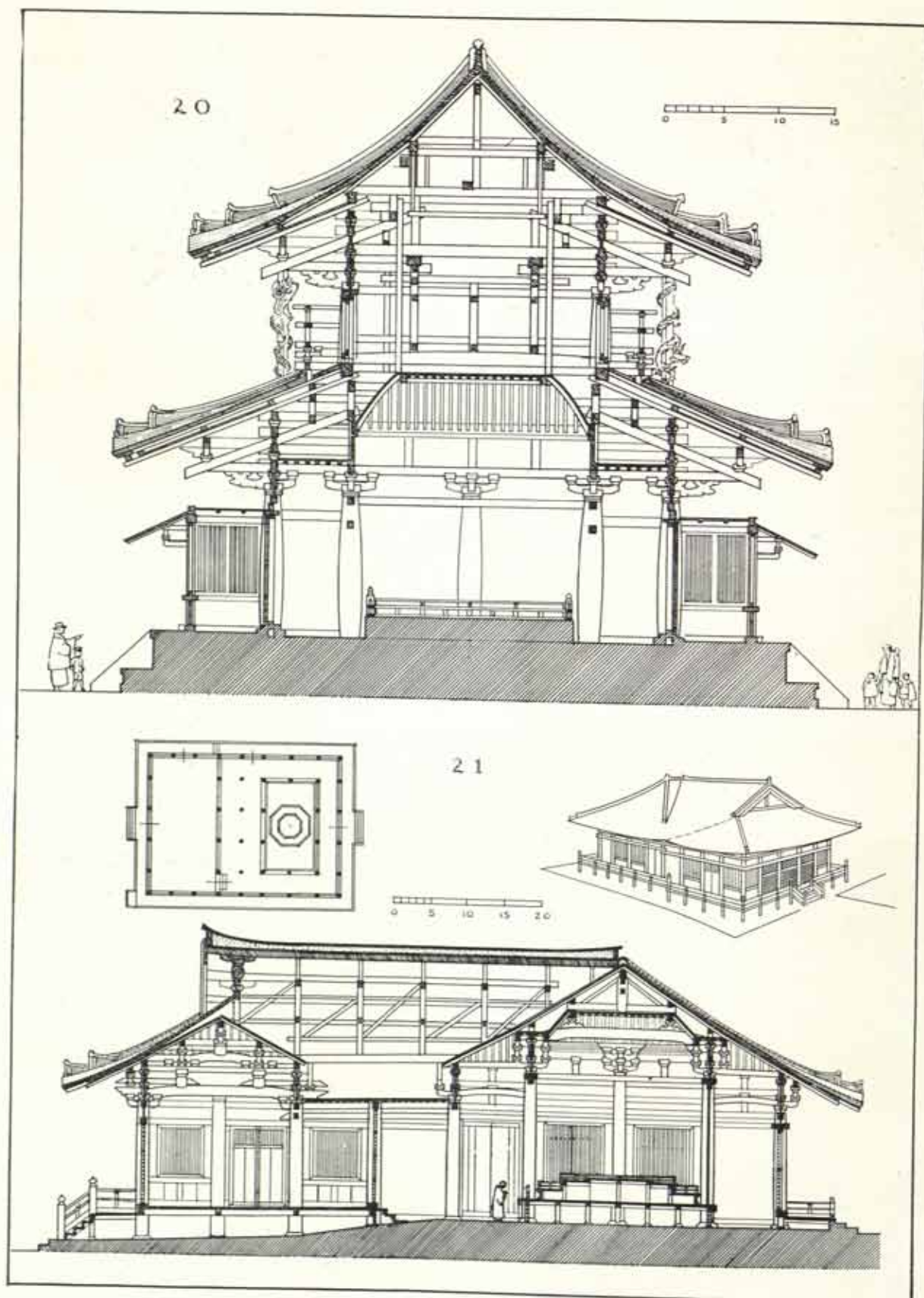


Fig. 20. Hōryūji "golden" hall, cross-section.

Fig. 21. Tōdaiji Hokkedō, cross-section, plan, schematic bird's-eye.



Fig. 22. Shinyakushiji main hall, interior.



Fig. 23. Tōdaiji Hokkedō, interior.



Fig. 24. Todaiji Hokkedō, original rear facade.

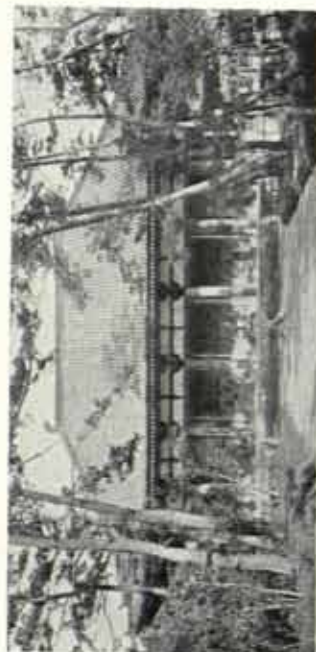


Fig. 25. Tōshōdaiji "golden" hall, front.



Fig. 27. Hōryūji Yumedono, view.

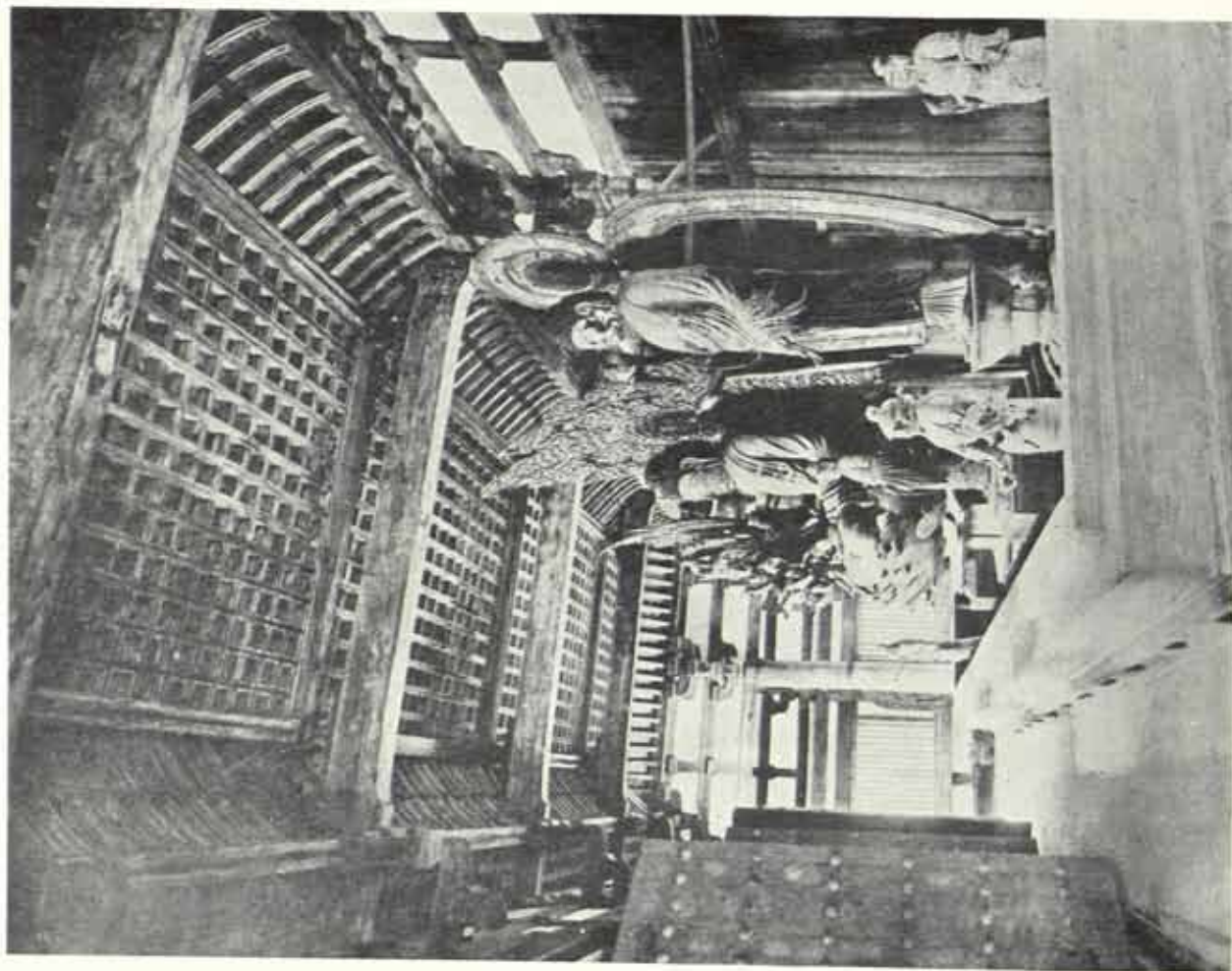
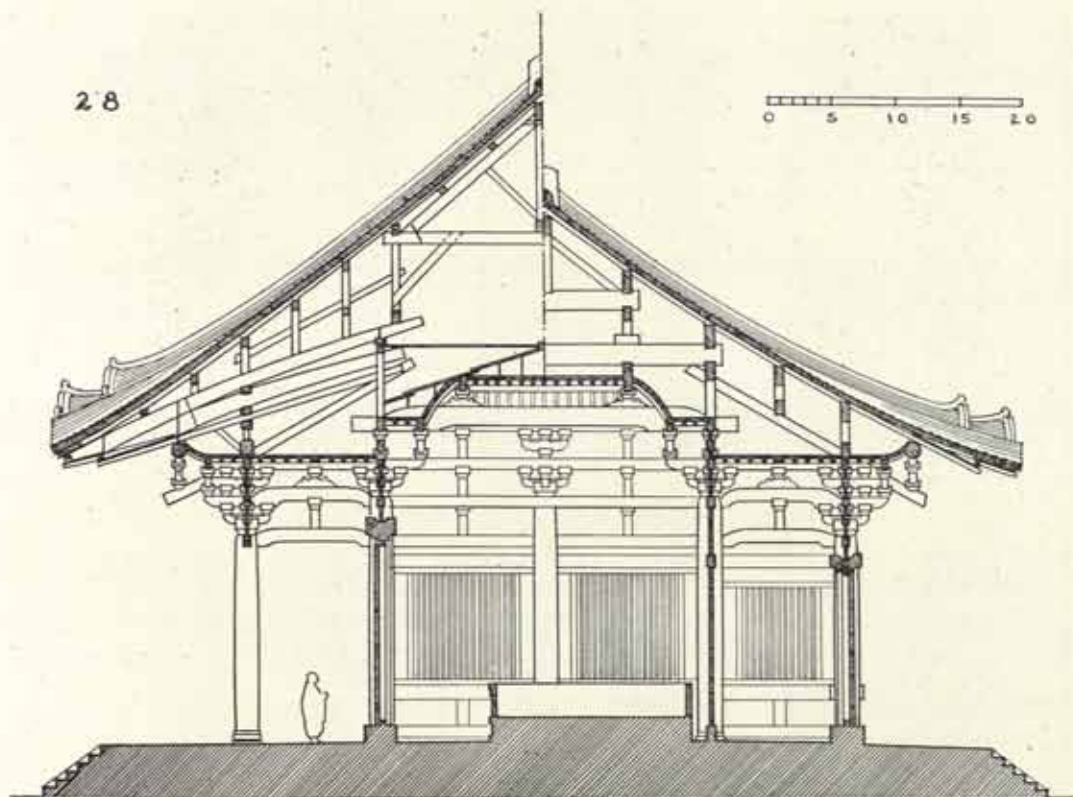


Fig. 26. Tōshōdaiji "golden" hall, interior.

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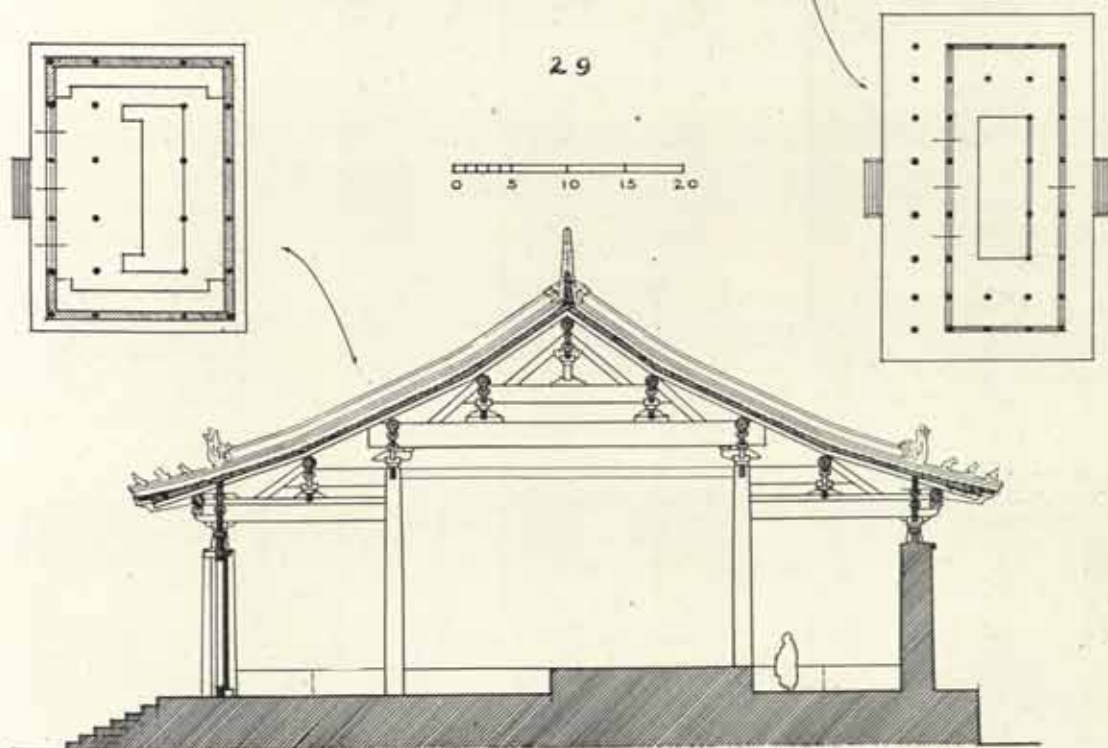


Fig. 28. Tōshōdaiji "golden" hall, cross-section, plan.

Fig. 29. Ta-t'ung, Hua-yen-ssū, Hai-hui-tien, cross-section, plan.

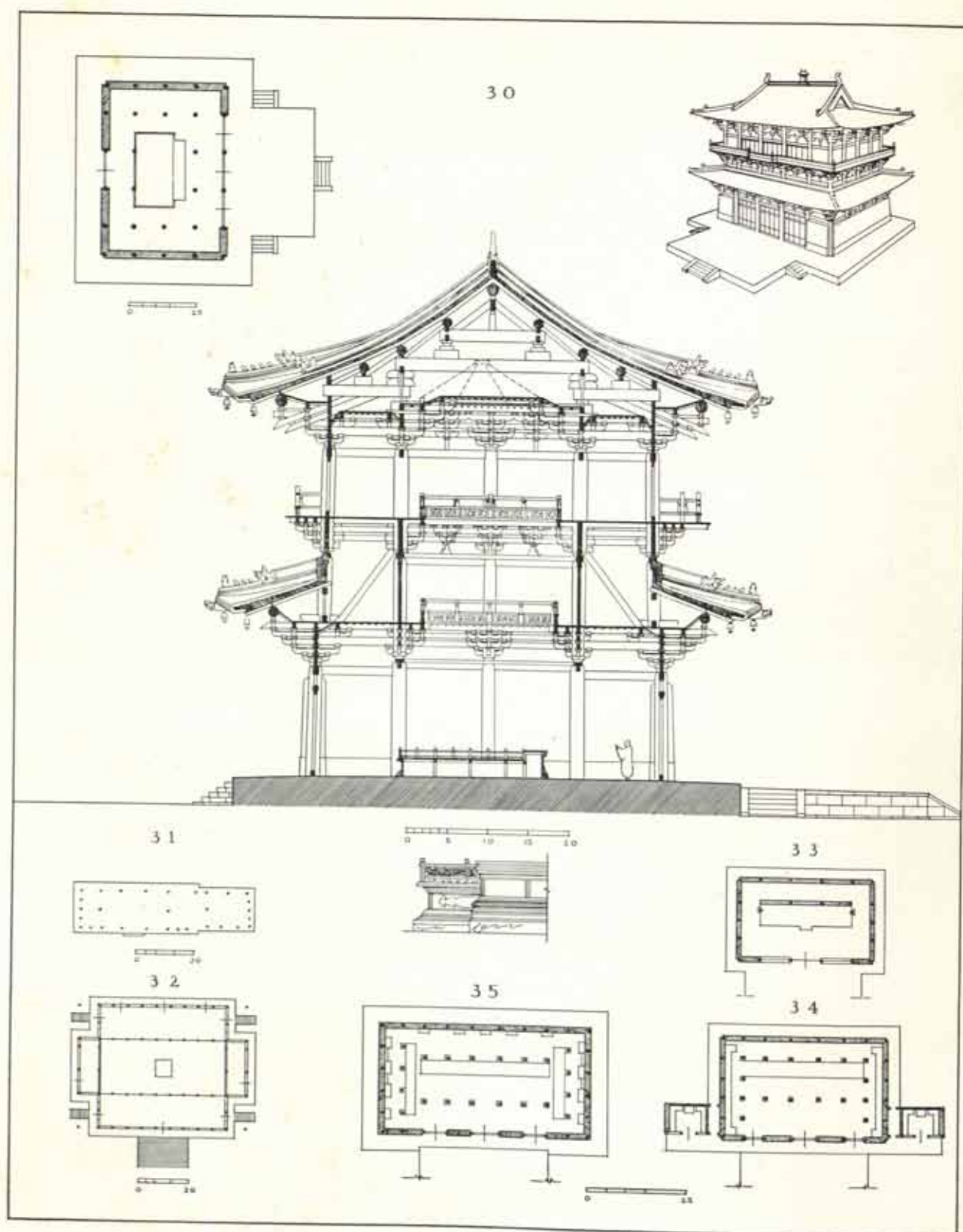


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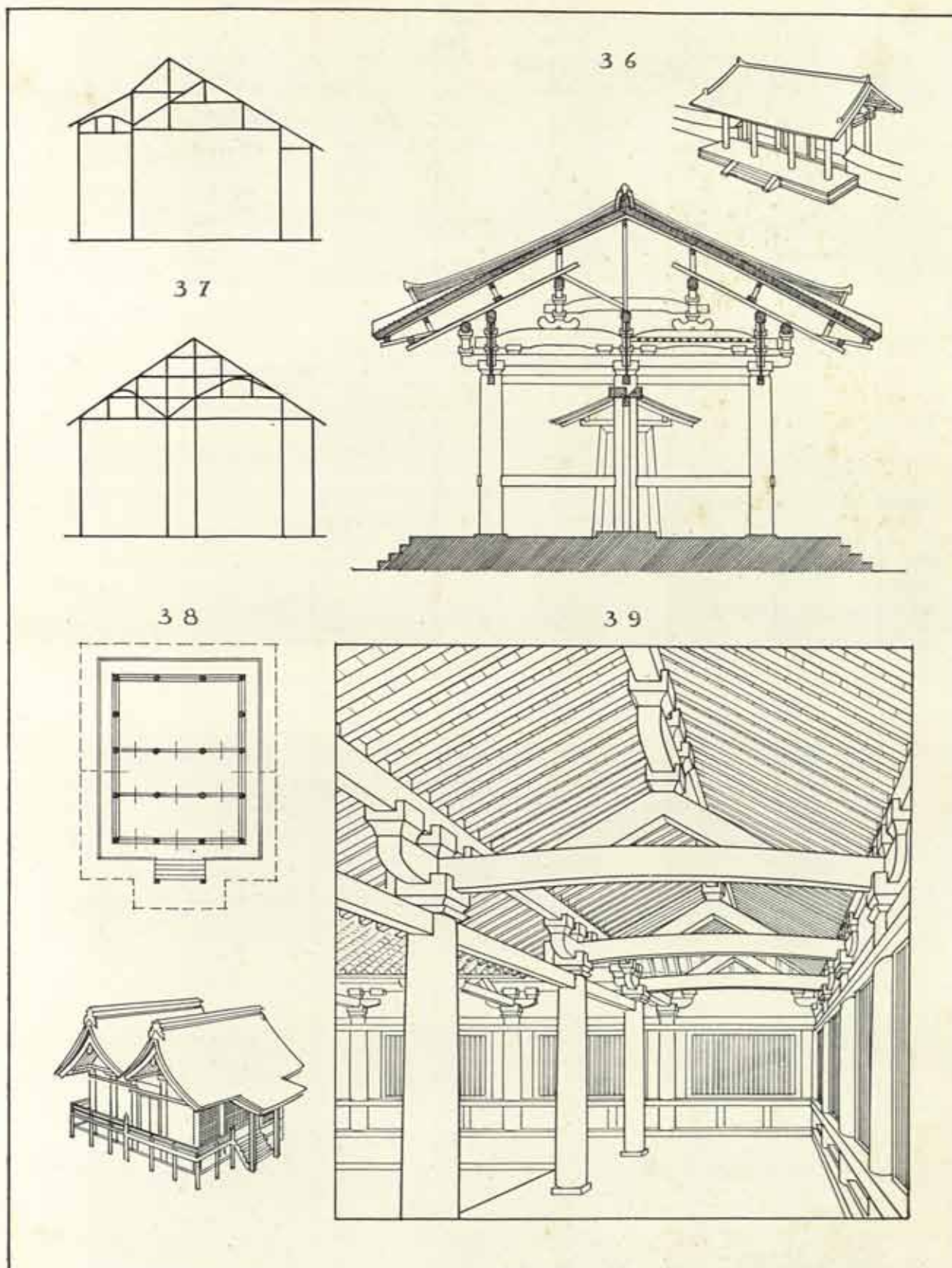


Fig. 36. Tōdaiji Tengaimon gate, cross-section, schematic bird's-eye. Fig. 37. Yüan Chih, late Ming roofing types in south China. Fig. 38. Hachiman shrine, plan, schematic bird's-eye. Fig. 39. Hōryūji cloisters, view inside seventh century wing.



Fig. 40. Kairyūōji western "golden" hall, end view.



Fig. 41. Tōdaiji Shōsōin storehouse, front.



Fig. 42. Chéng-t'ing-hsien, Confucian shrine, front.

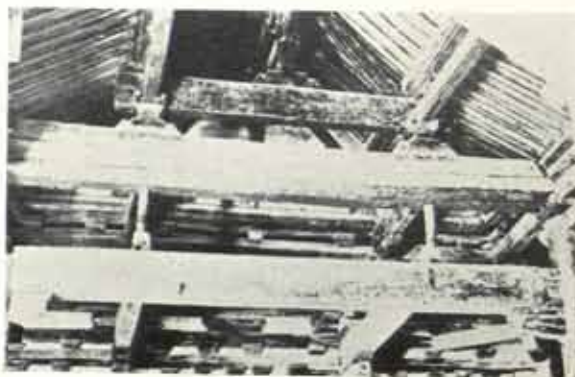


Fig. 43. Chéng-t'ing-hsien, Confucian shrine, interior.

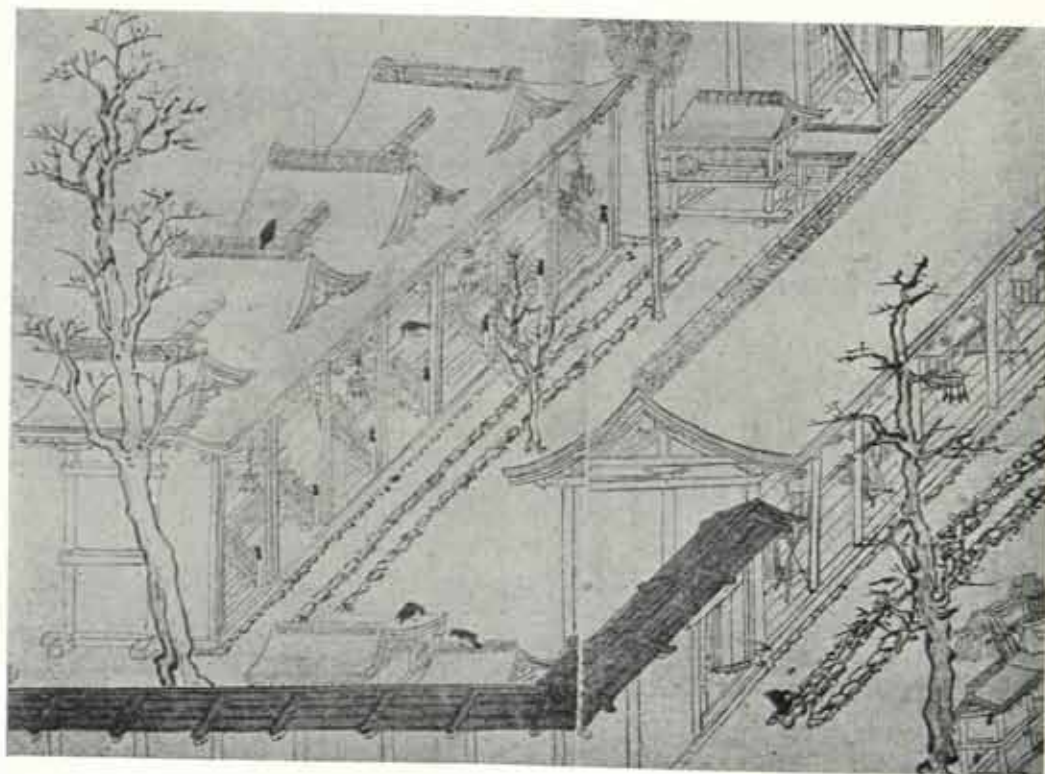
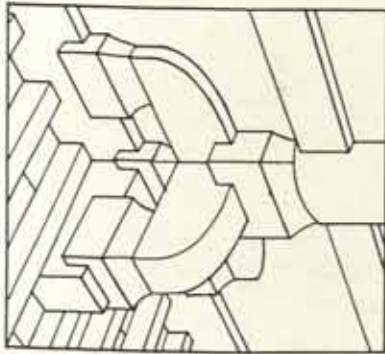
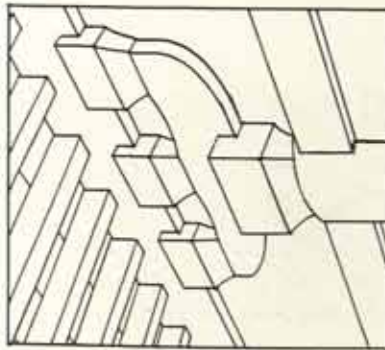


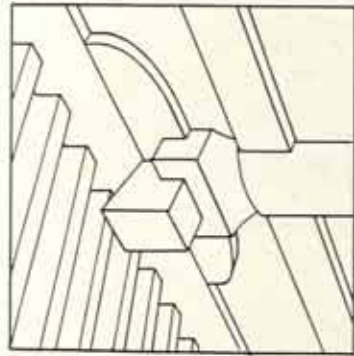
Fig. 44. Shintō shrine of Kasuga type (from the *Nenjū-gyōji*).



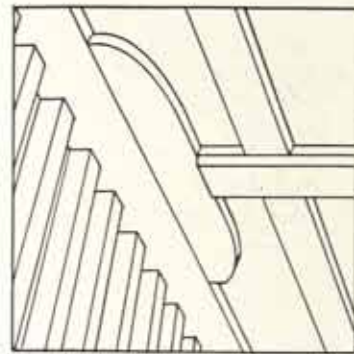
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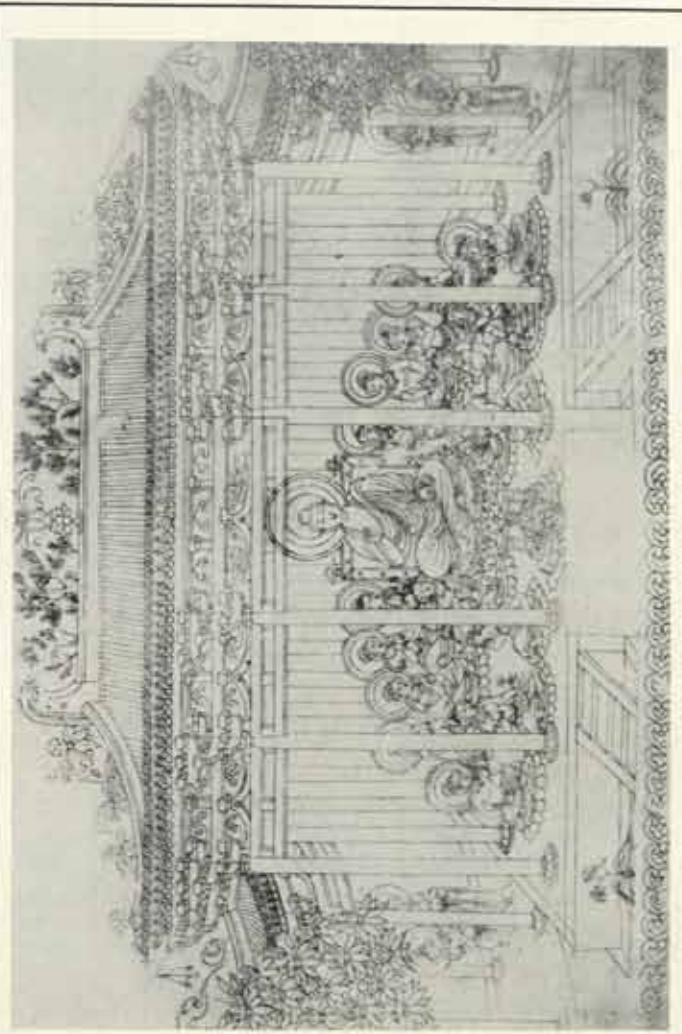
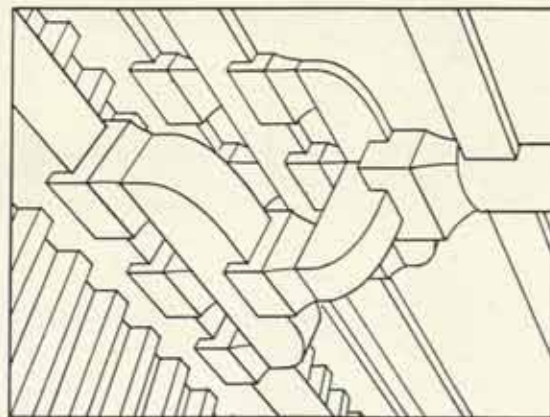


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Figs. 45-49. Schematic bracketing development.
Fig. 50. Hsi-an-fu, Ta-yen pagoda, drawing on lintel (redrawn from rubbing).

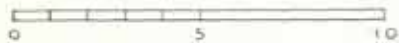
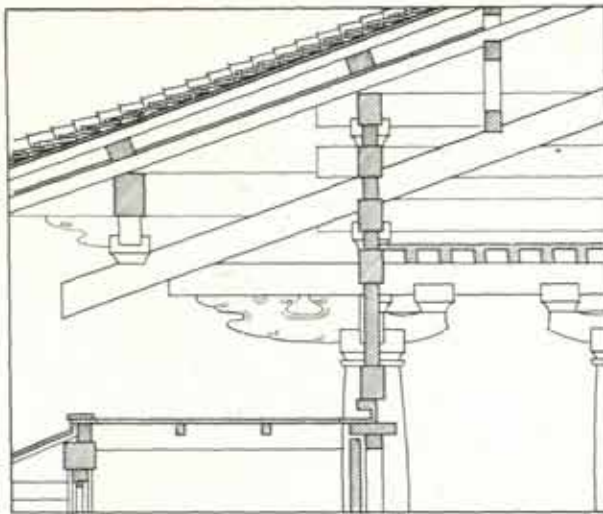


Fig. 51. Hōryūji "golden" hall, Asuka bracketing.

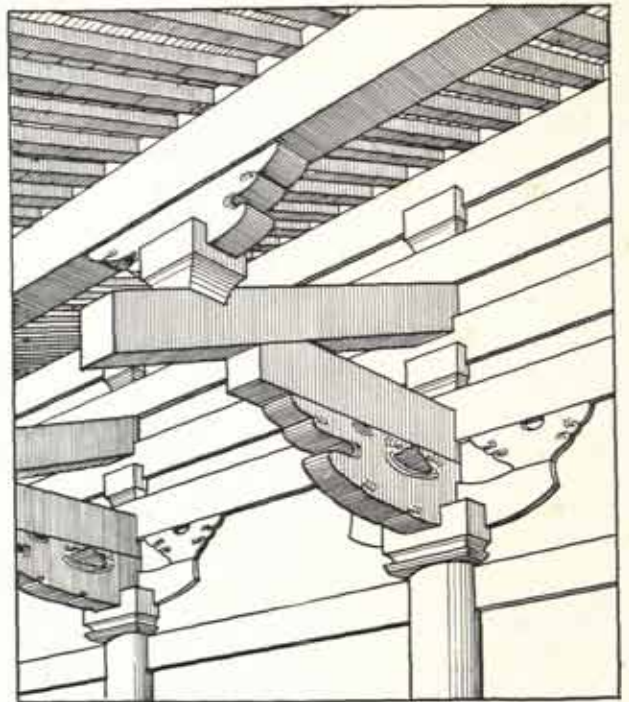
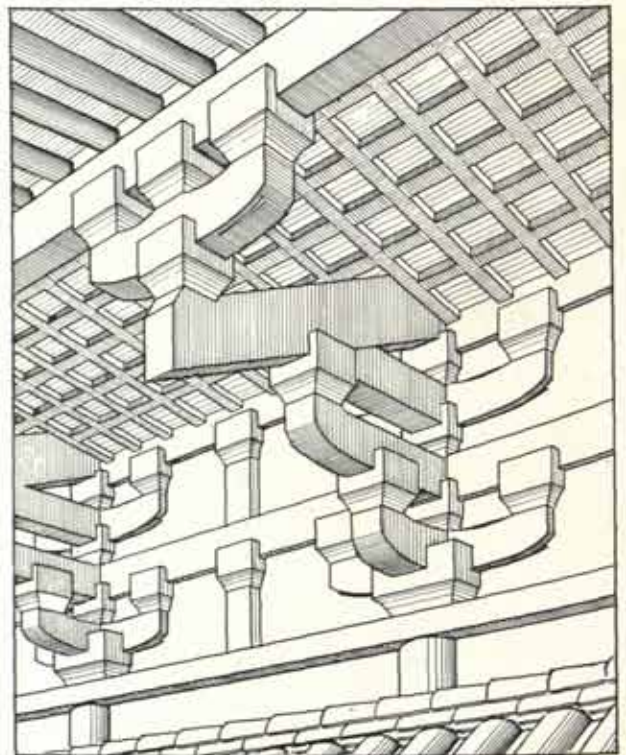
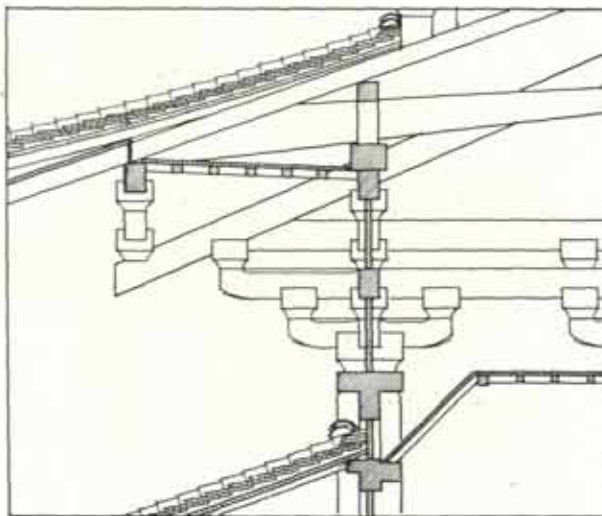
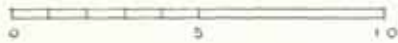


Fig. 52. Yakushiji pagoda, "proto-Nara" bracketing.



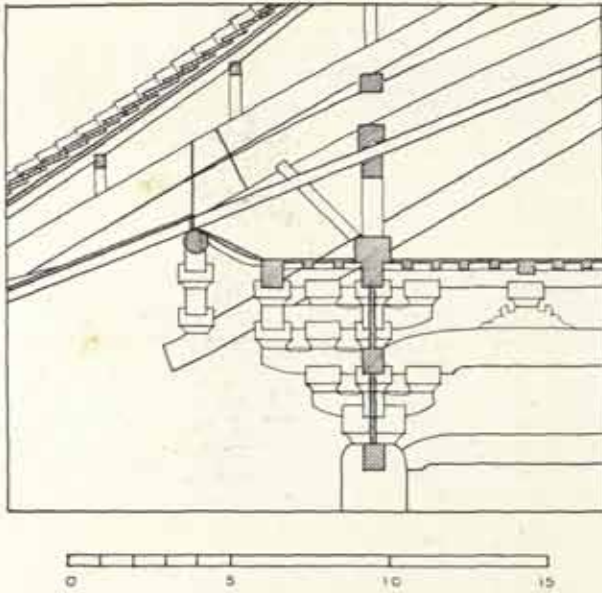


Fig. 53. Tōshōdaiji "golden" hall, Nara bracketing.

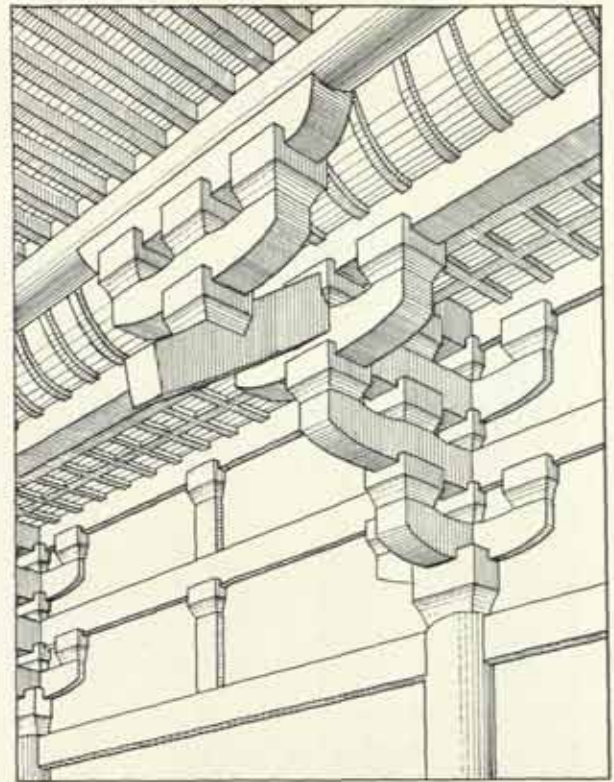


Fig. 54. Karayō bracketing of Kamakura period.

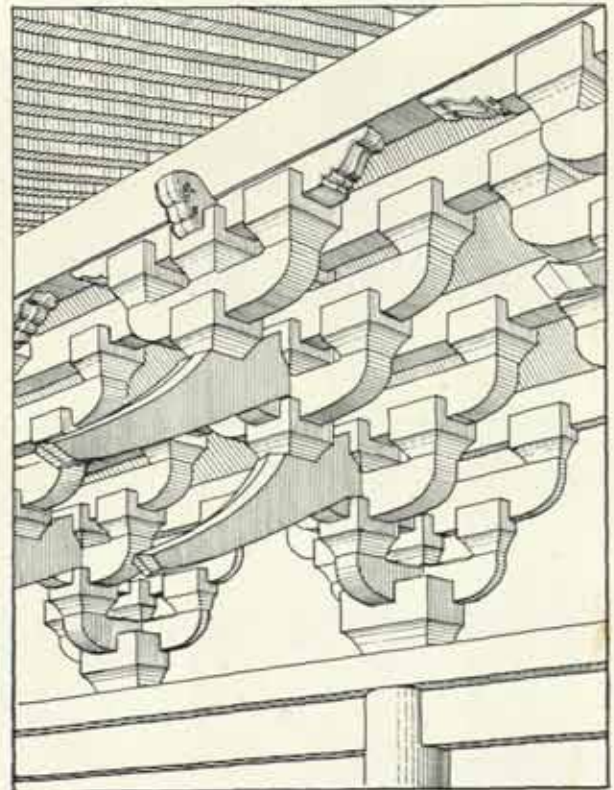
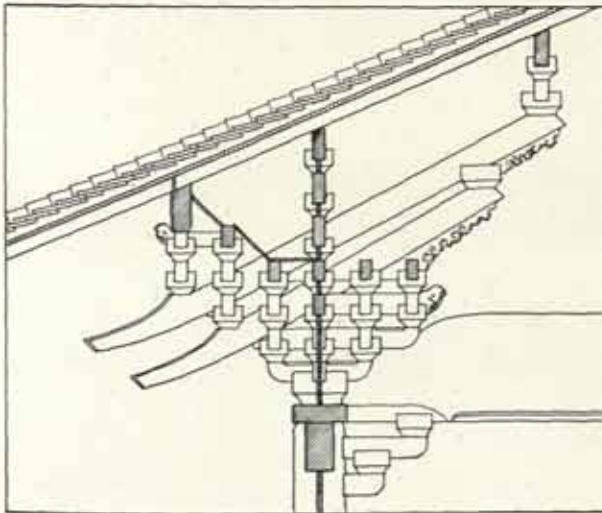
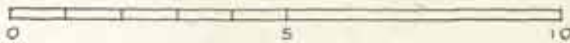




Fig. 55. Han dynasty miniature watch-tower
(Nagao Kinya collection)

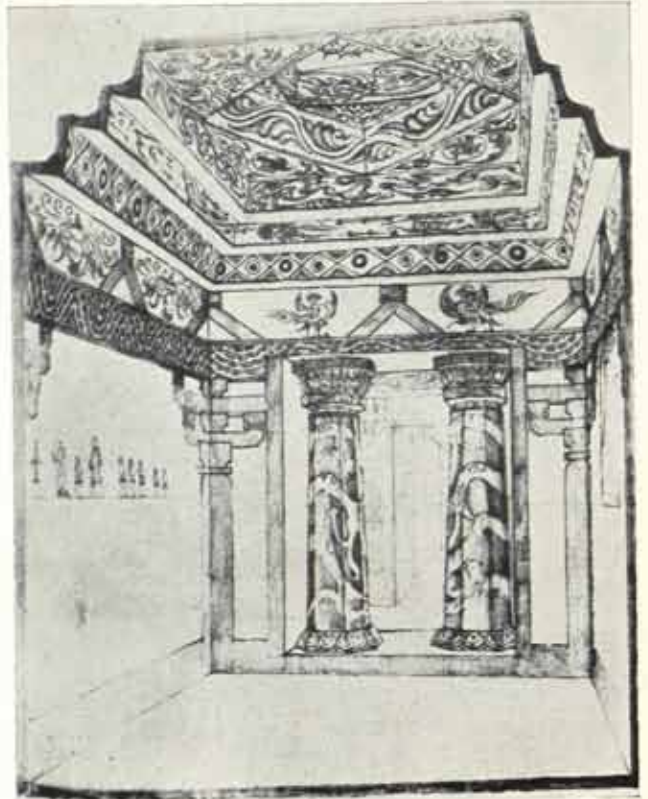


Fig. 56. Korea, old Kokuli kingdom, "tomb of the
two pillars."

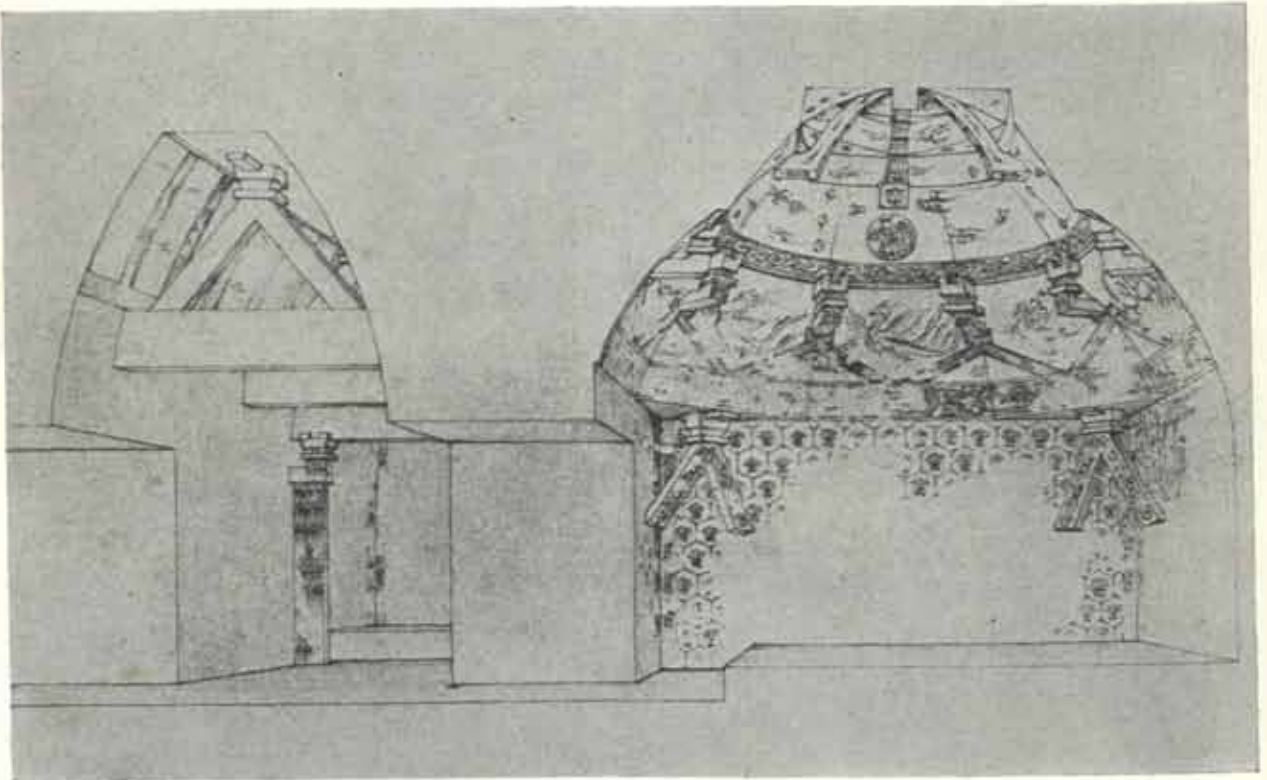


Fig. 57. Korea, old Kokuli kingdom, "tomb of the Celestial Kings and Earthly Spirits."

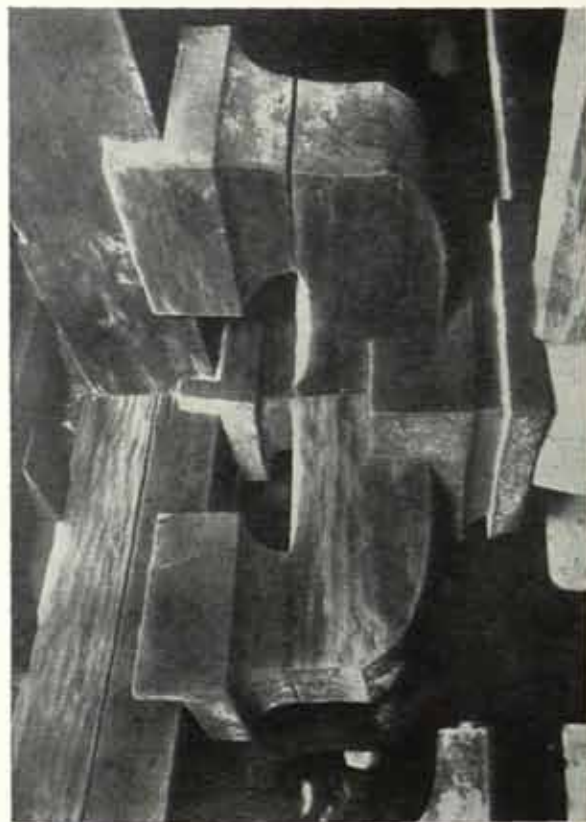


Fig. 58. Hōryūji "golden" hall, interior bracketing arm.



Fig. 59. Hōryūji "golden" hall, caves bracketing and railing.

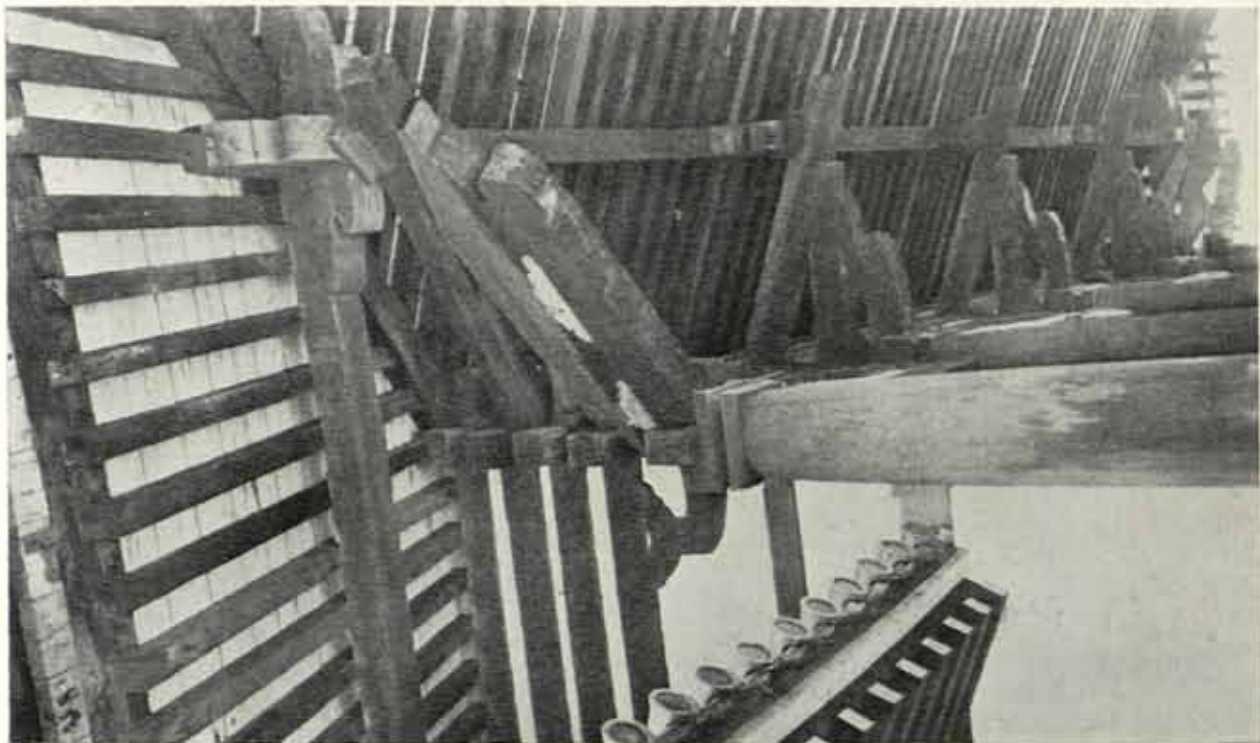


Fig. 60. Hōryūji middle gate, corner bracketing.



Fig. 61. Tamamushi shrine.



Fig. 62. Kairyūōji miniature pagoda.

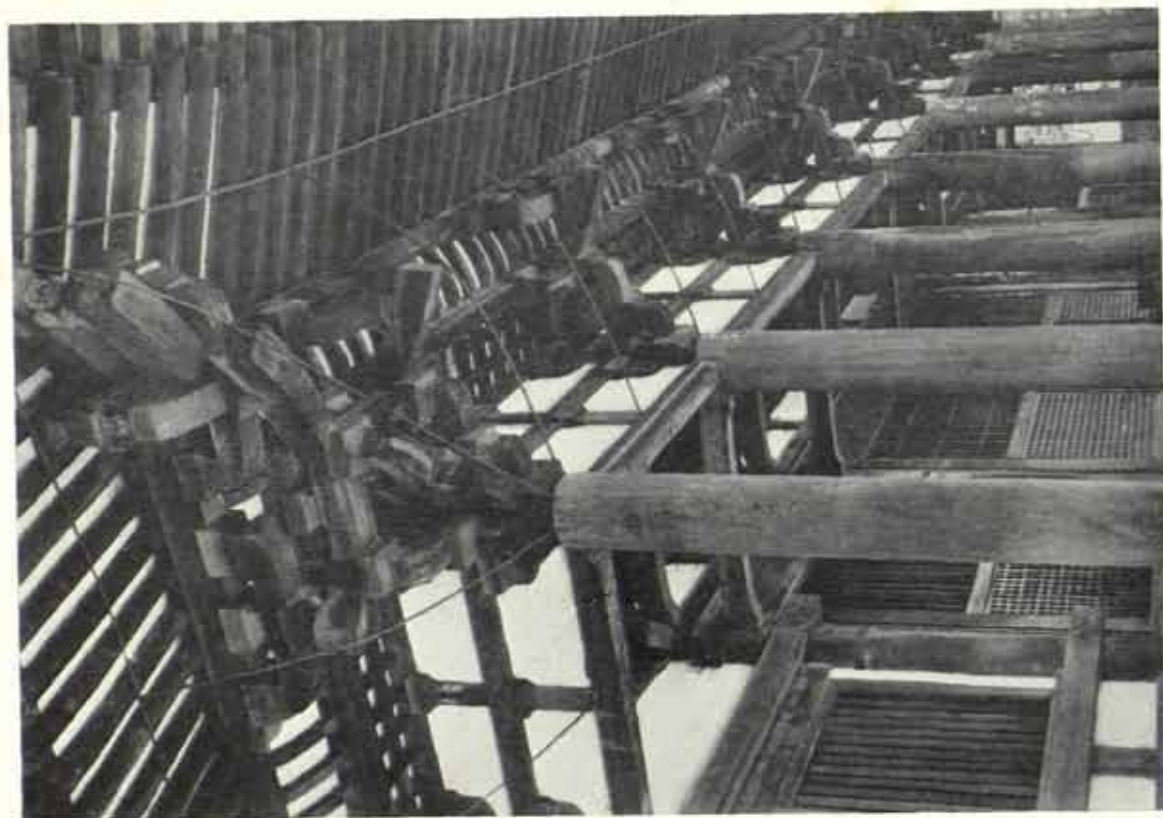


Fig. 63. Tōshōdaiji "golden" hall, corner bracketing.

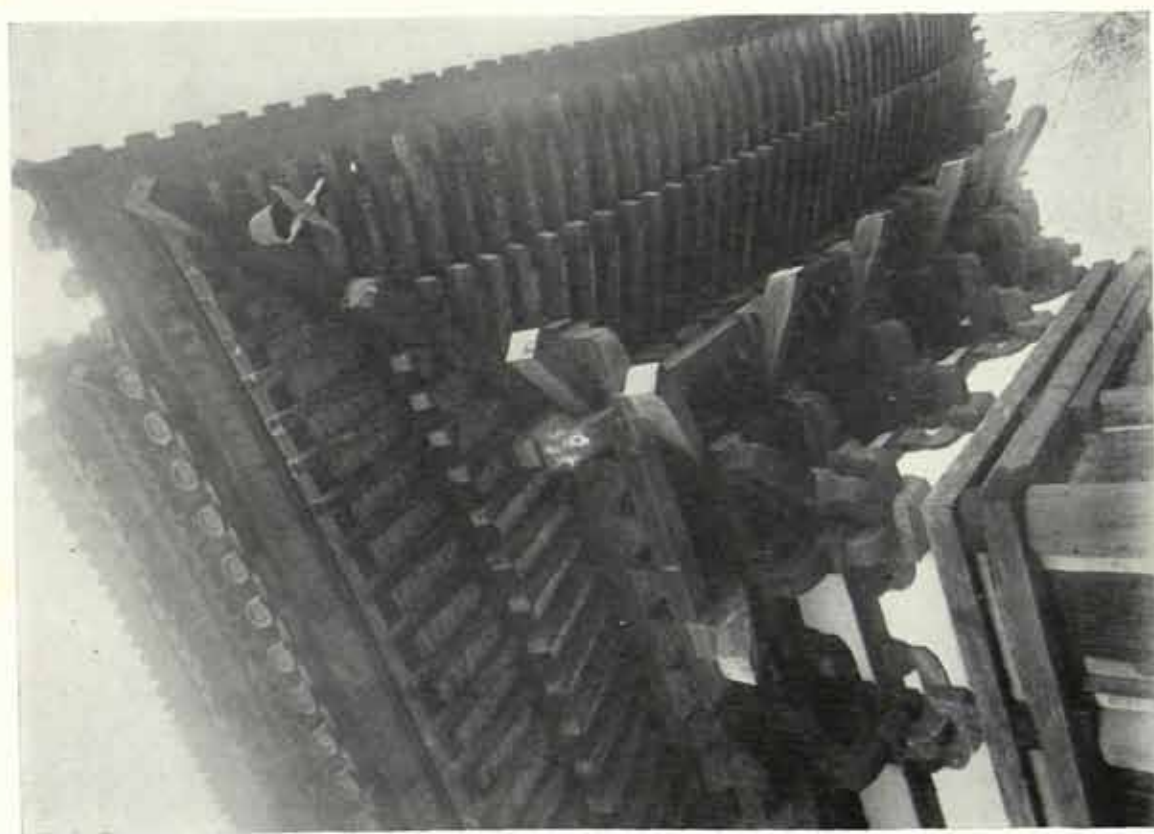


Fig. 64. Taimadera east pagoda, corner bracketing.



Fig. 65. Shinyakushiji main hall, gable detail.

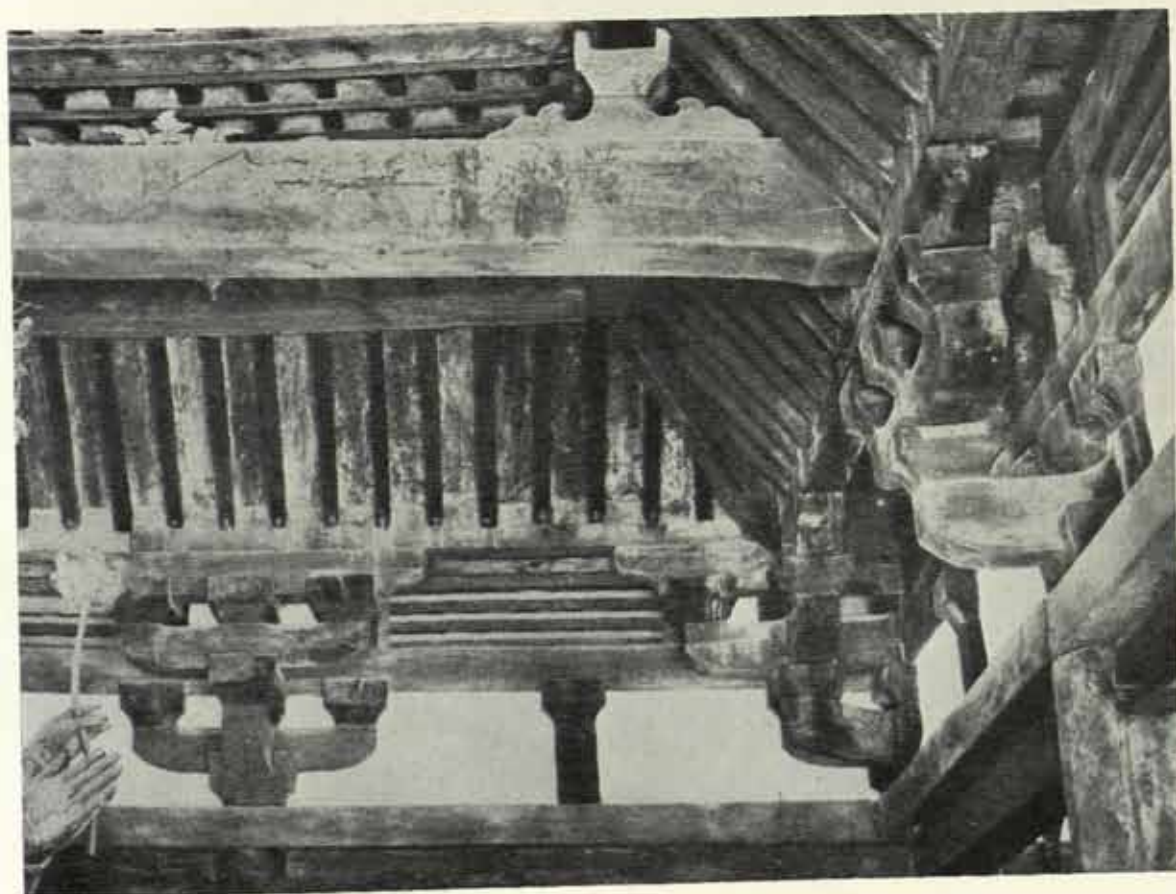


Fig. 66. Tōdaiji Hokkedō, detail of chancel ceiling treatment.



Fig. 68. Tōdaiji Hokkedō, altar railing.



Fig. 67. Tōji, Rengemon gate, details under gable end.



Fig. 71. Tōshōdaiji "golden" hall, altar platform panelling.

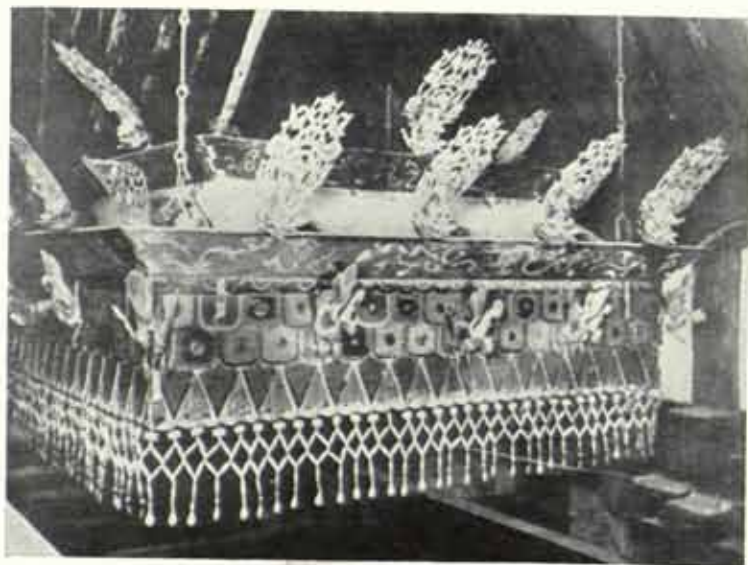


Fig. 70. Hōryūji "golden" hall, canopy over main icons.

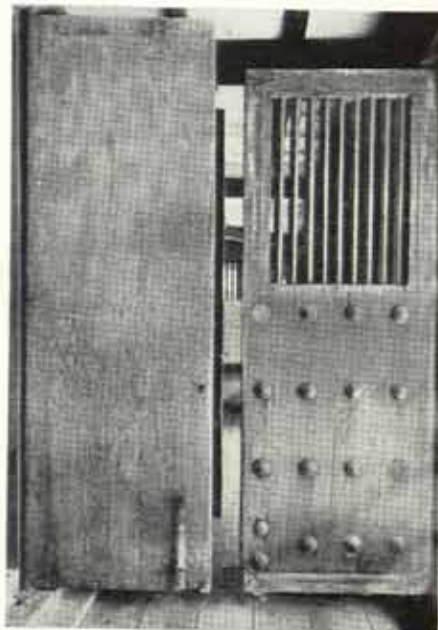


Fig. 69. Hōryūji "golden" hall, seventh and eighth century doors.

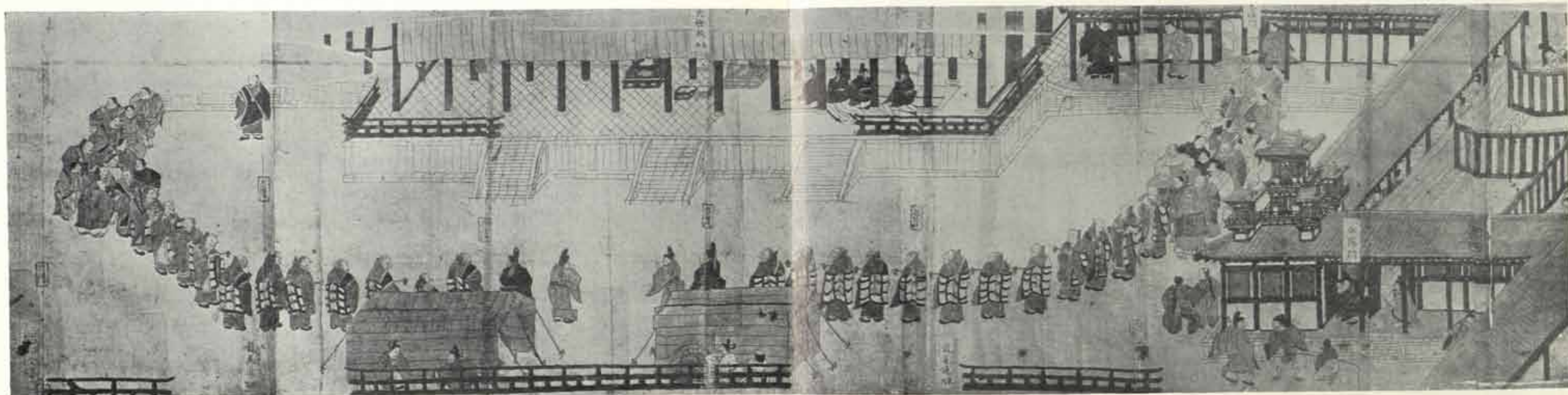


Fig. 74. Grand circumnambulation about the Heian Hall of State, Daigokuden, during the annual *Gosai-e* ceremony (from the *Neijū-gyōji*).



Fig. 72. Kōyasan. Kongōbuji precincts in Kamakura period (from the *Ippen-shōnin-edon*; positions of hall and pagoda reversed)

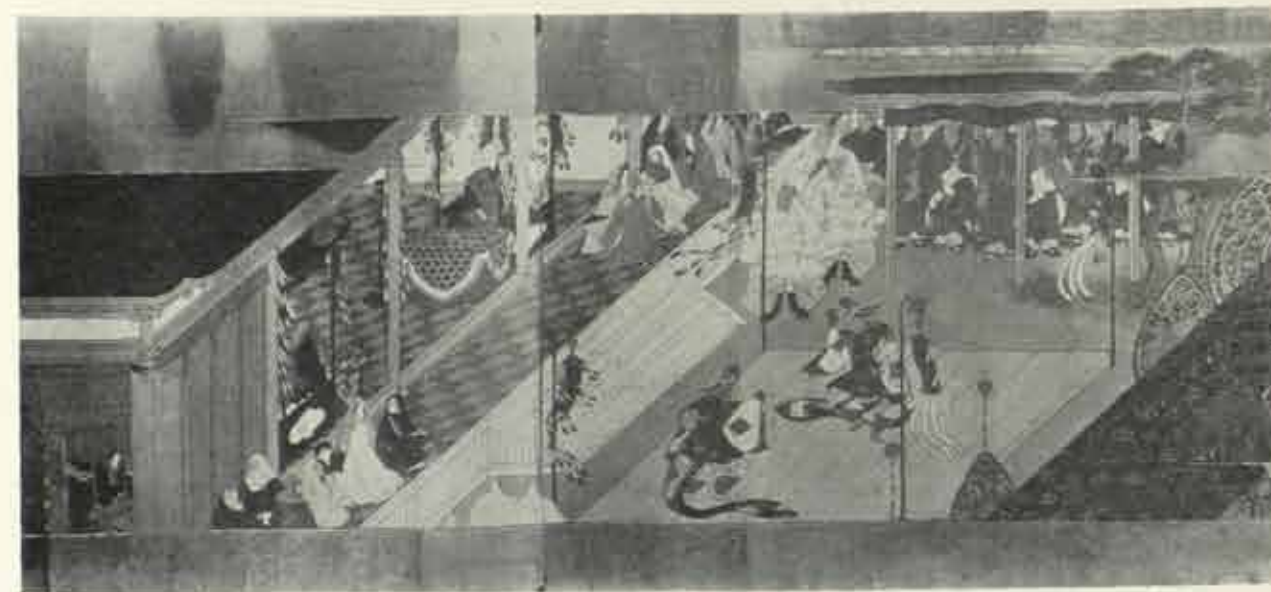


Fig. 73. Temple courtyard ceremonial (from the *Yamato-taimadera-chūjō-hime-engi*)

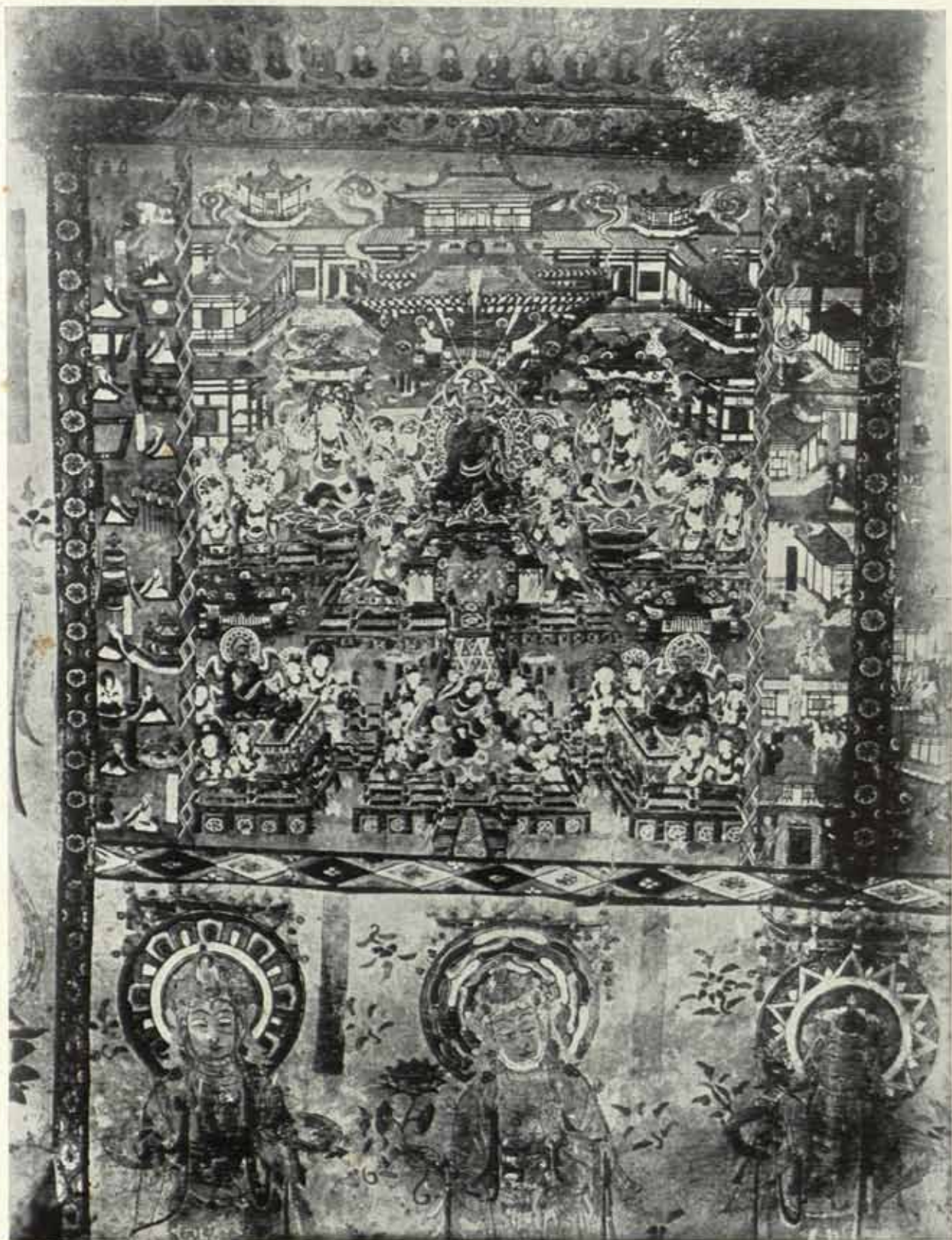


Fig. 75. Tun-huang, cave XIV, fresco of the Western Paradise.

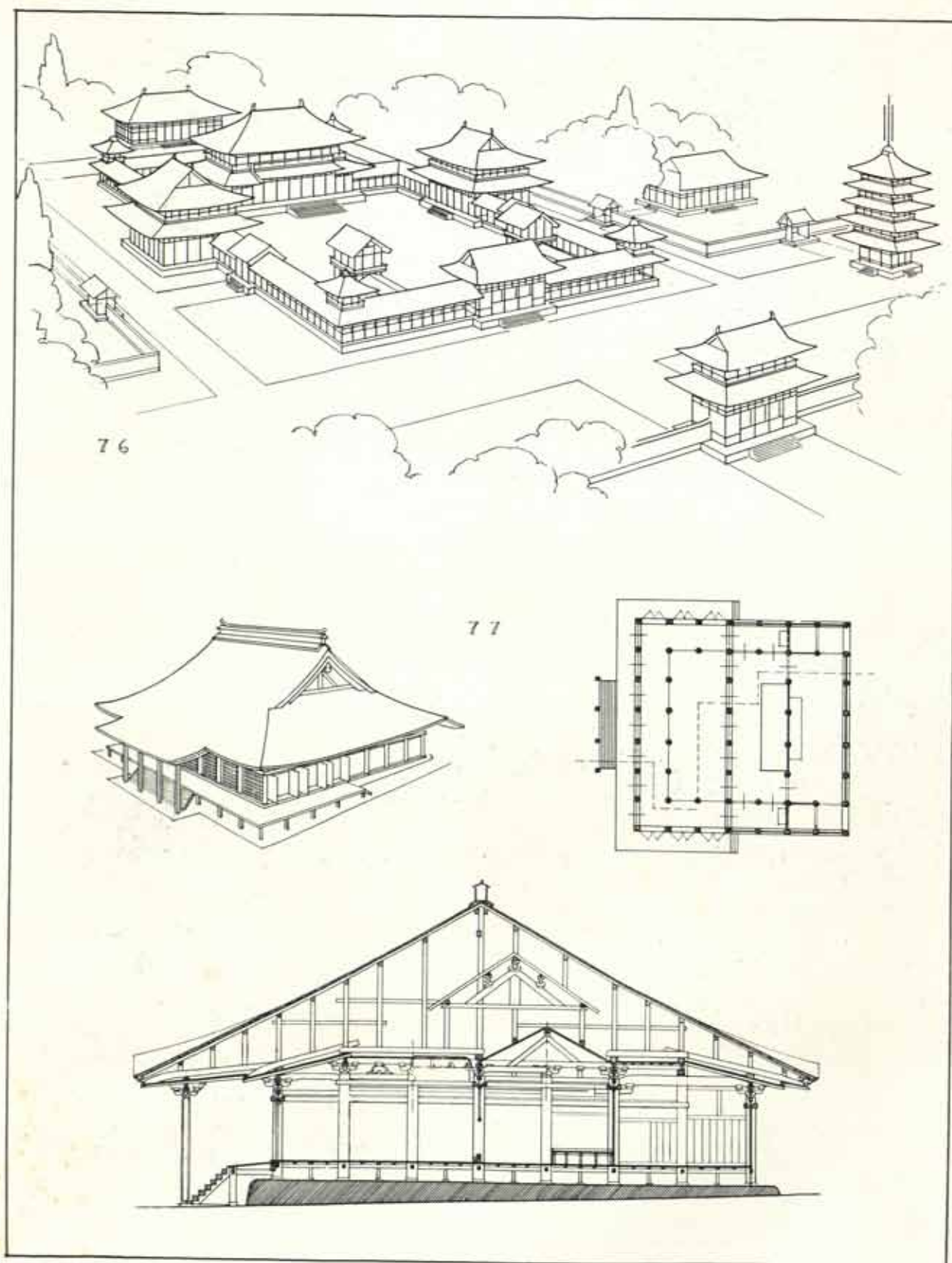


Fig. 76. Hōjōji, schematic bird's-eye reconstruction.

Fig. 77. Saimyōji main hall, cross-section, plan, schematic bird's-eye.



Fig. 79. Small-scale Kamakura period version of the patrician mansion style, *Shinden-zukuri* (from the *Ippen-shōnin-edon*).



Fig. 78. Byōdōin "phoenix hall," Hōtōdō, front.



Fig. 80. Shingon chapel, Shingonin, in the Heian Imperial palace (from the *Nenjū-gyōji*).

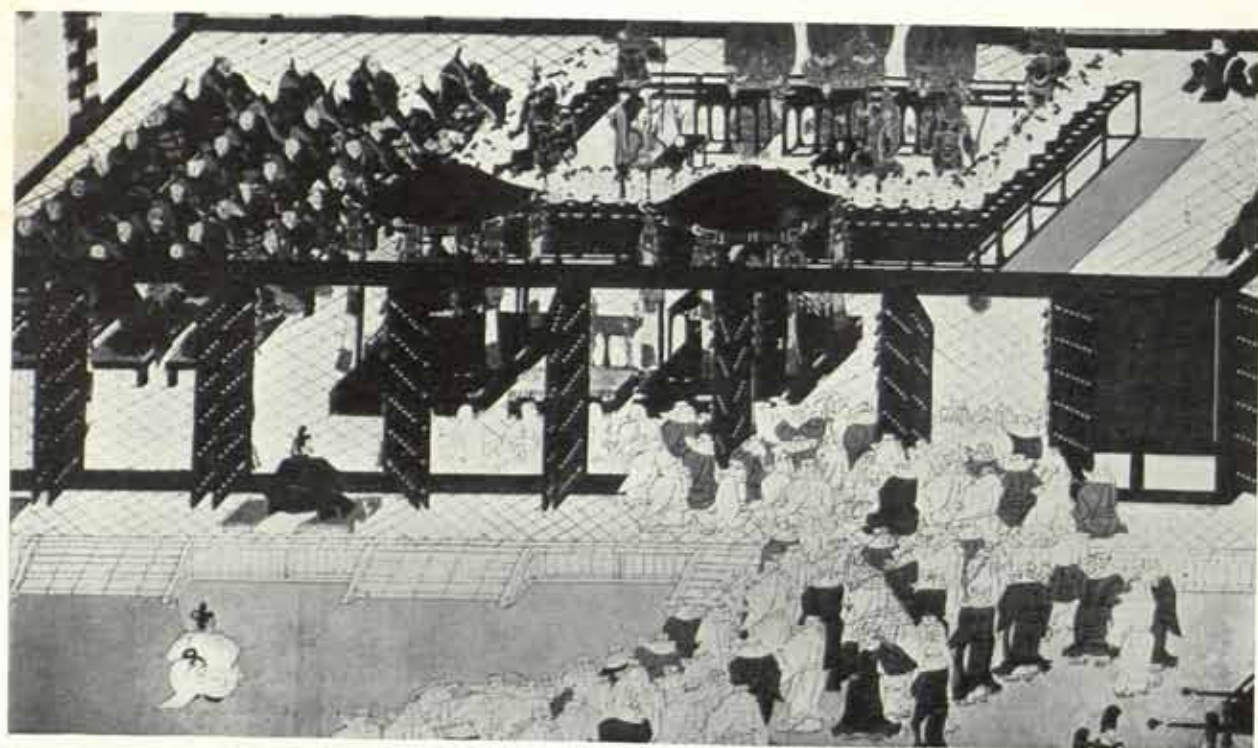


Fig. 81. Annual exposition of the *Vimalakīrti sūtra*, *Yuima-e*, in the Kōfukuji lecture hall (from the *Kasuga-gongen-reikenki*).

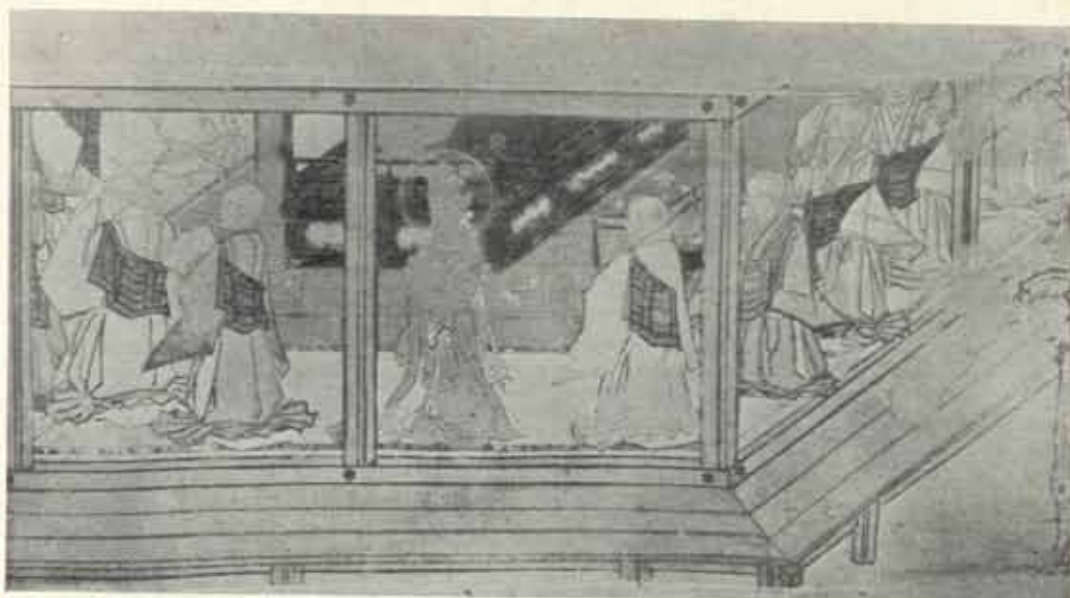


Fig. 82. The rite of *pradakṣiṇa*, or *gyōdō* (from the *Hōnen-shōnin-edan*).

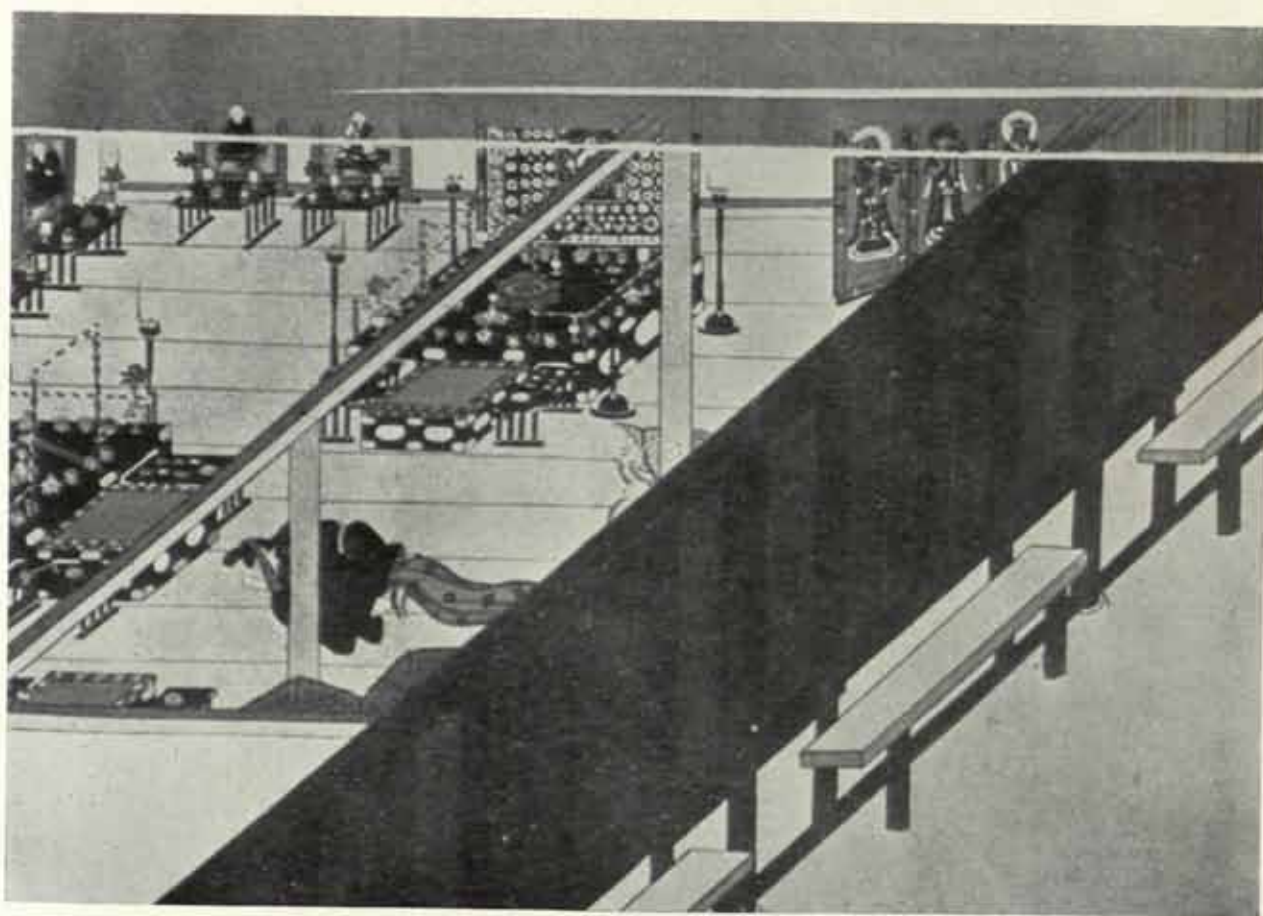


Fig. 83. The deity of Kasuga, invoked by a priest of Kōfukuji, appears (in full court dress) to worship at a Shingon altar (from the *Kasuga-gongen-reikenki*).

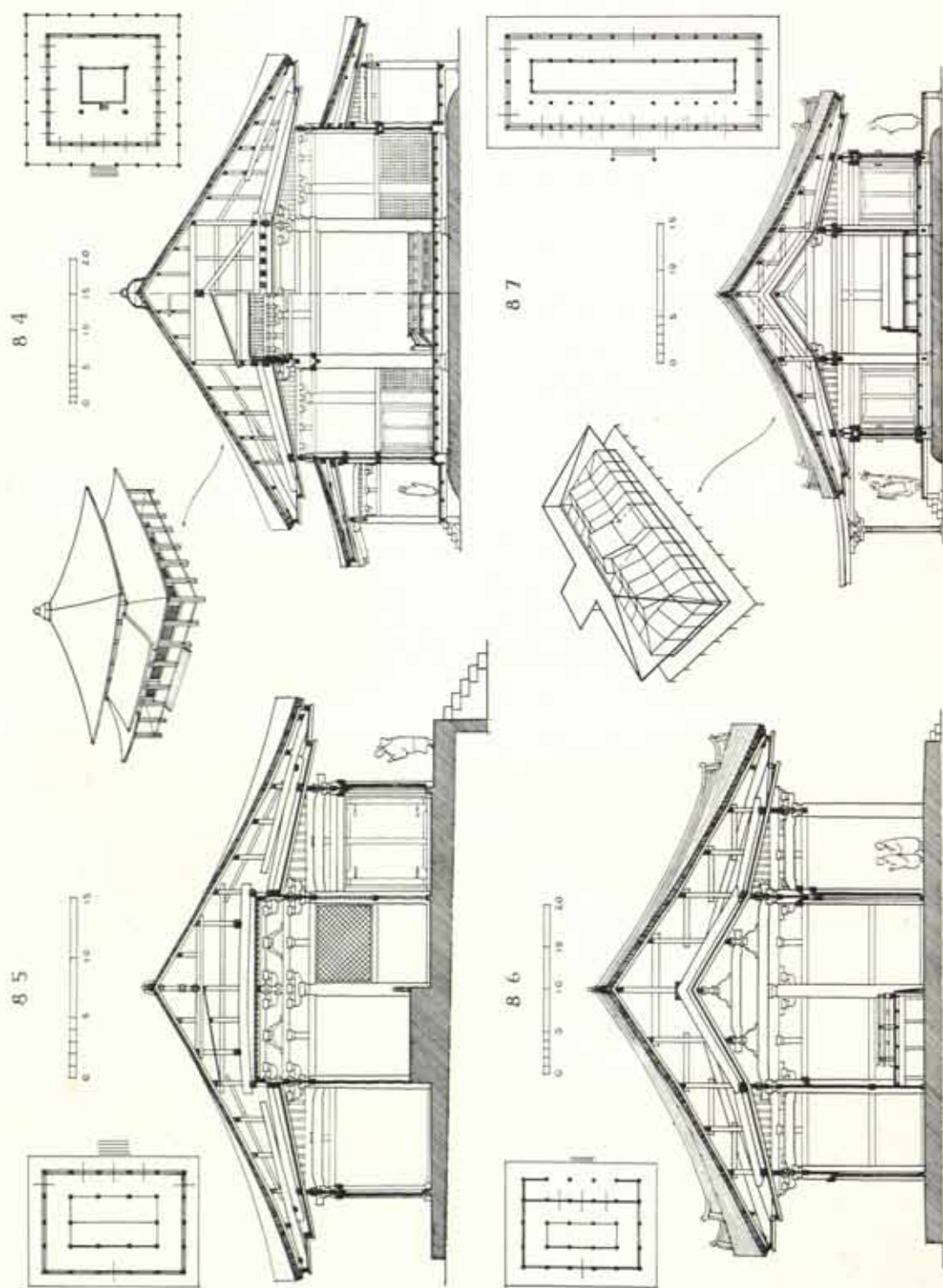
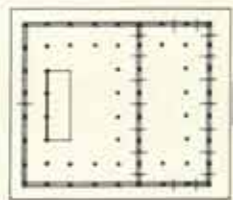
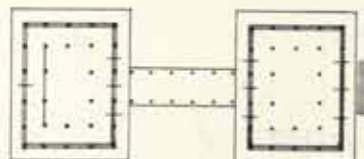


Fig. 84. Hōkaiji Amidadō, cross-section, plan, schematic bird's-eye. Fig. 85. Kani-daigo Yakushidō, cross-section, plan, Fig. 86. Kōryūji lecture hall, cross-section, plan. Fig. 87. Jōruriji main hall, cross-section, plan, roof diagram.

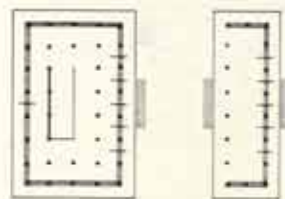
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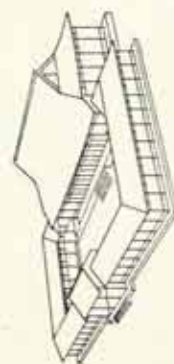
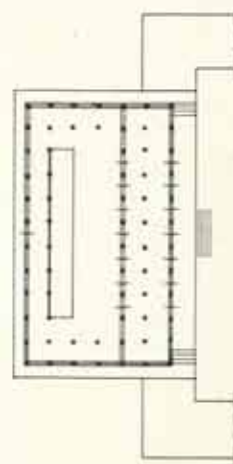
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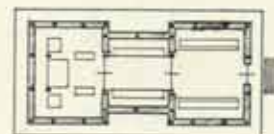
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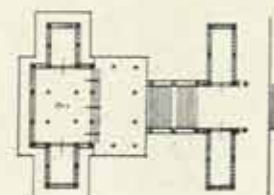
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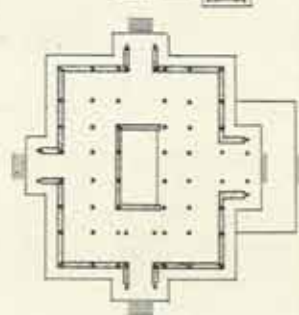
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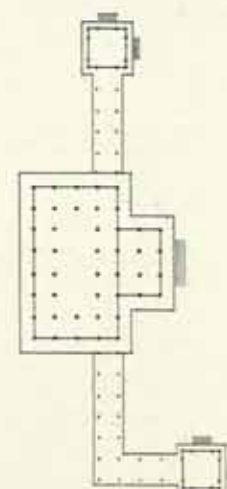
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Figs. 88-95. Reconstructions of (88) Enryakuji lecture hall; (89) Koryuji "golden" hall; (90) Kami-daigo Junteido; (91) Myōrakuji lecture hall; (92) Po-hai palace, garden pavilion. Schematic views of (92) Sheng-ku-miao (93) Huo-hsing-sheng-ku-miao (94) Lang-hsing-ssu Mo-ni-tien.



Fig. 96. Hōkaiji Amidadō, front.

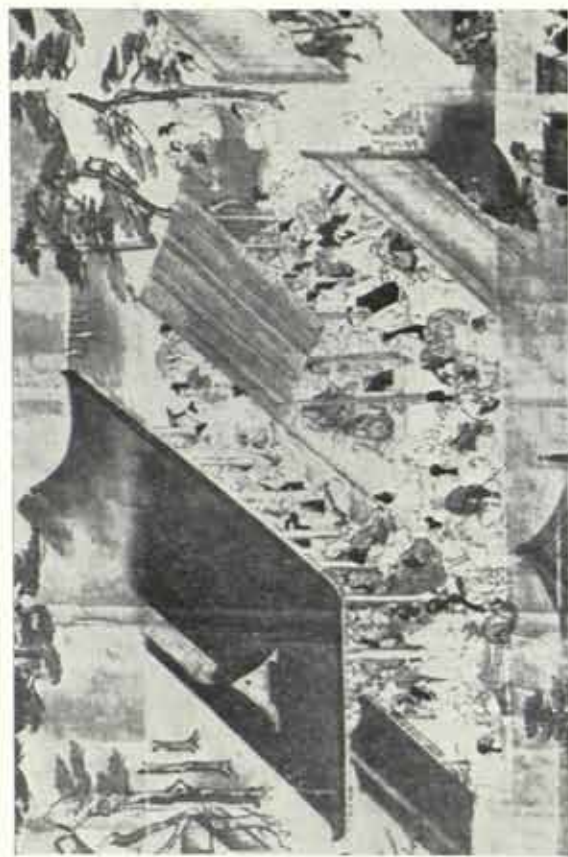


Fig. 97. Kōnyōfukuji, main hall and raikō during the Kamakura period (from the *Ippen-shōnin-eden*).



Fig. 98. Peking, Lama temple, main hall.

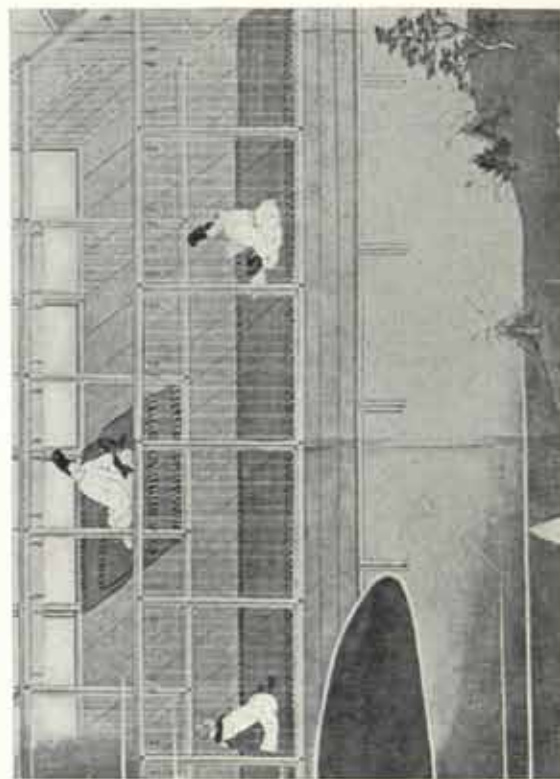


Fig. 99. Domestic quarters of an Imperial palace, Heian period; the retired Emperor Shirakawa dictates a message to the deity of Kasuga (from the *Kasuga-gongen-reikenki*).



Fig. 100. Peking, Old Palace Museum: palace painting by Li Jung-chin of the Yüan dynasty.



Fig. 101. Ajantā, cave 26; rock-cut *stūpa* at rear.



Fig. 102. The iconographic Tahōtō.



Fig. 103. Ishiyamadera Tahōtō.

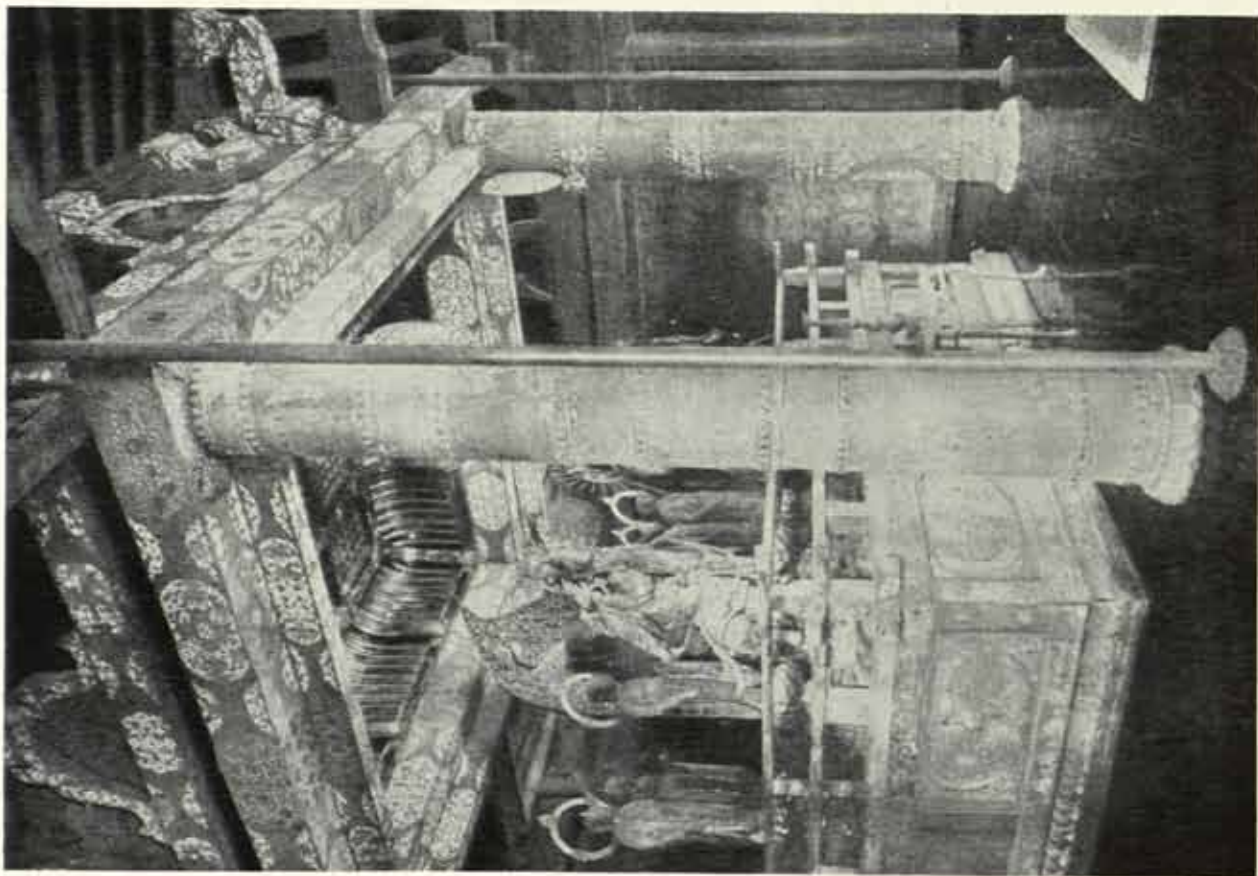


Fig. 104. Chūsonji Konjikidō, interior.

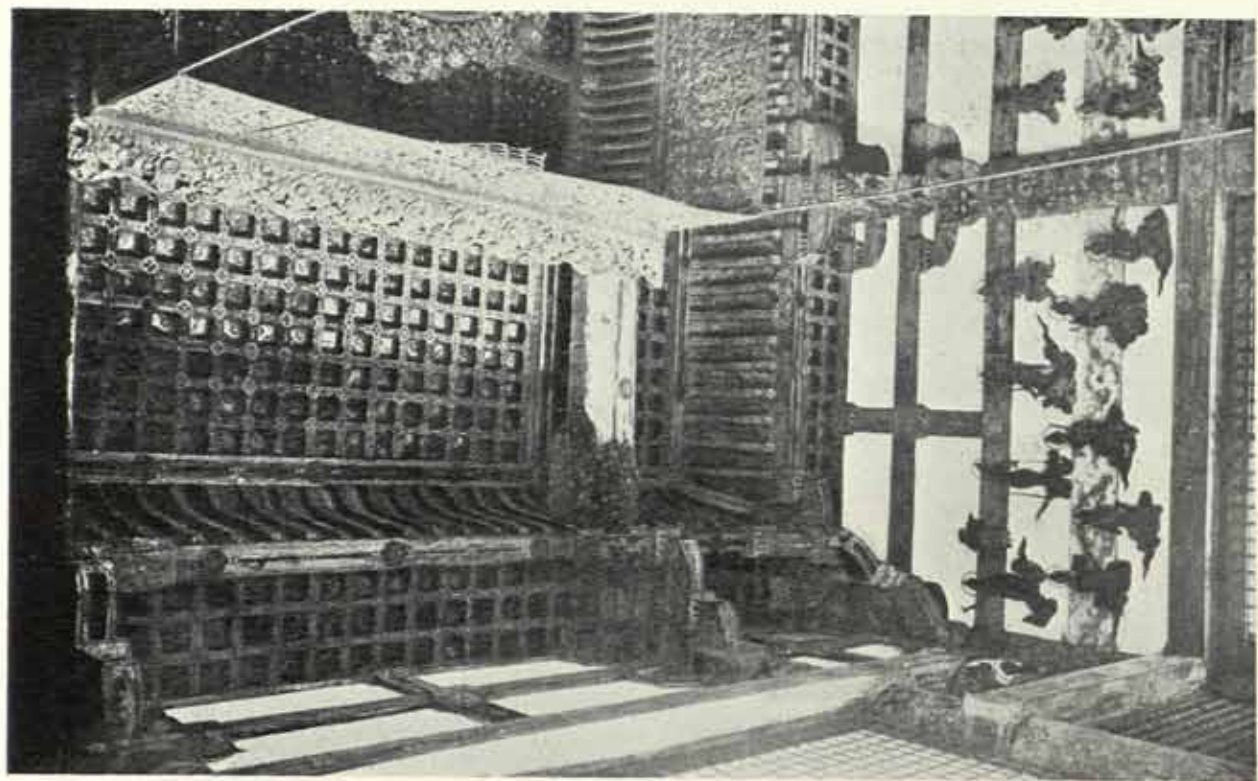


Fig. 105. Byōdōin Hōdō, interior.

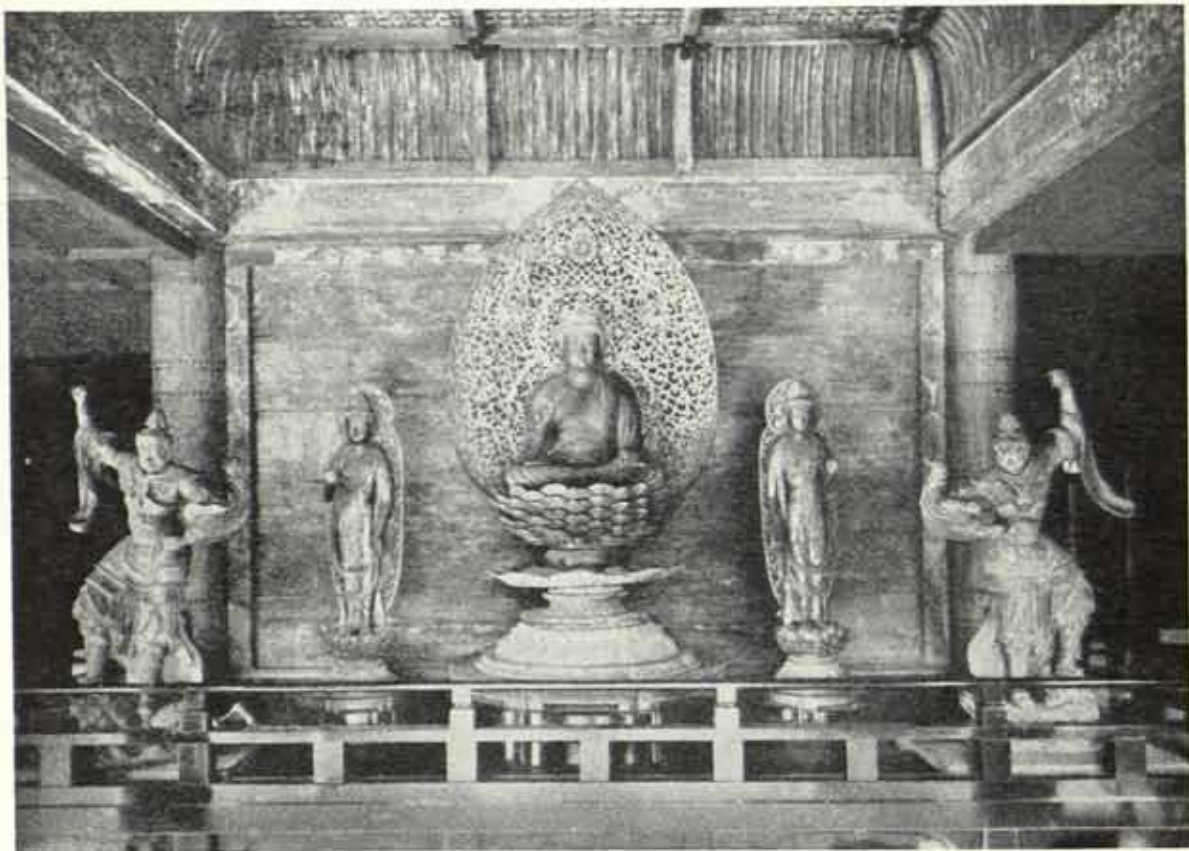


Fig. 106. Shiramizu Amidaō, interior.



Fig. 107. Daigoji pagoda, detail of bracketing.



Fig. 108. Kōryūji lecture hall, chancel beam system.

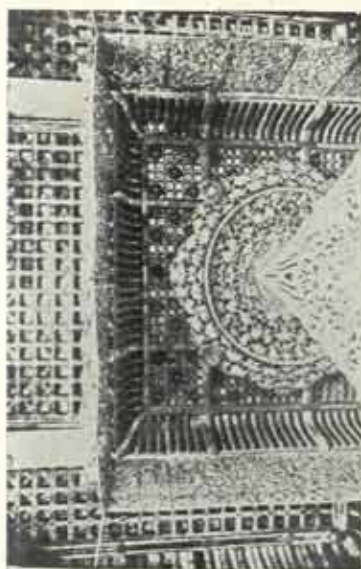


Fig. 111. Byōdōin Hōōdō, canopy above altar.

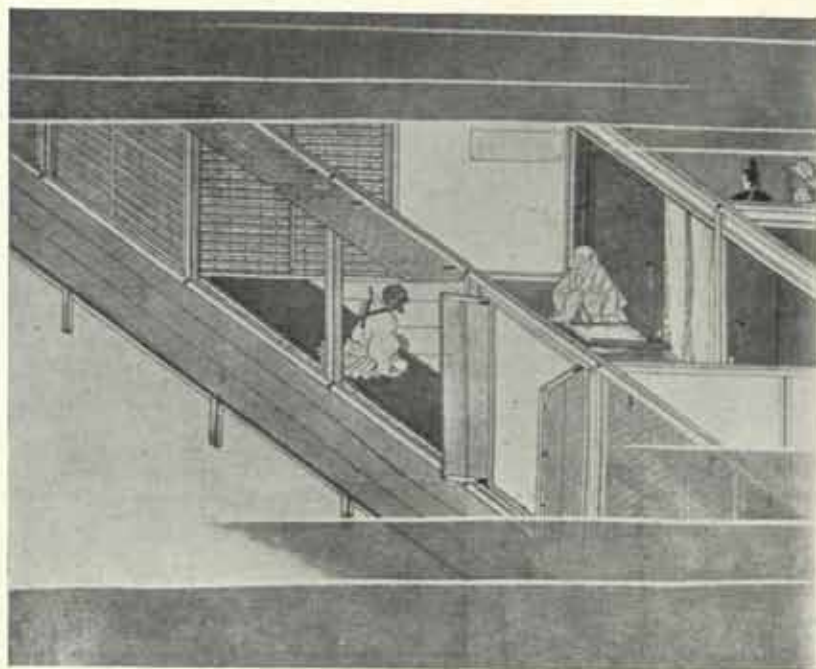


Fig. 110. Door forms in Heian domestic architecture (from the *Kasuga-gongen-reikenki*)

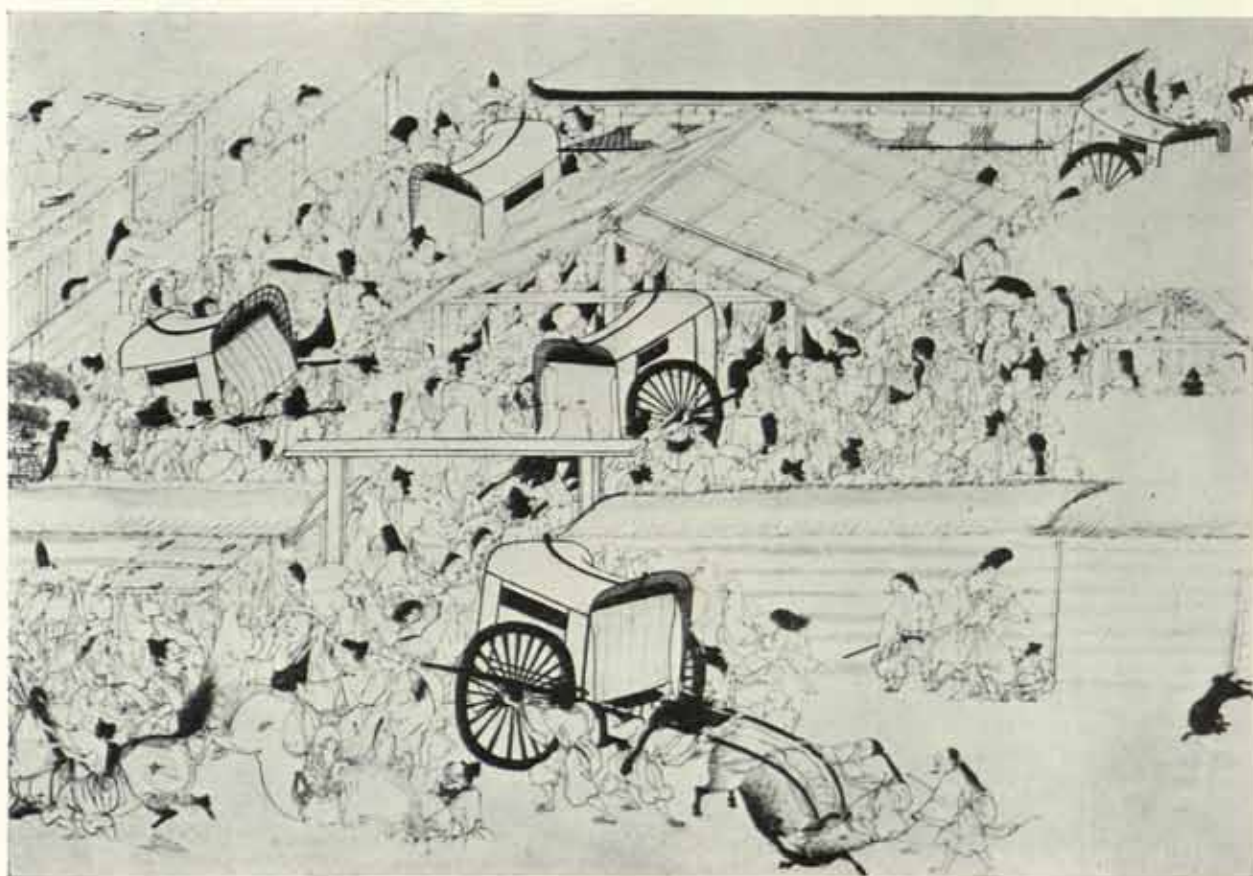


Fig. 109. Crowds pressing to hear Ippen preach (from the "Tosa Mitsuoki" version of the *Ippen-shōnin-eden*).



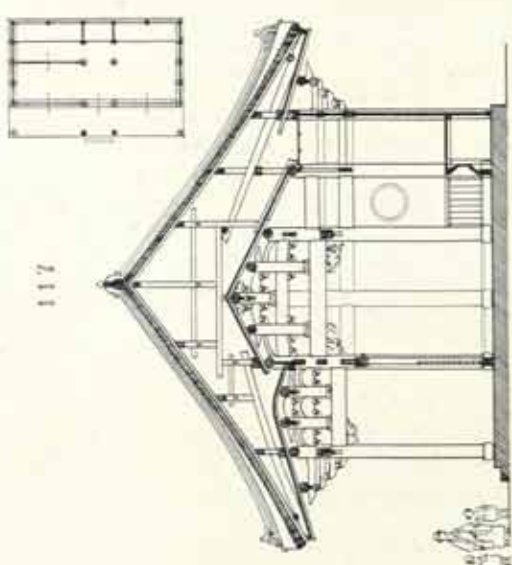
Fig. 112. Tōdaiji great south gate, front.



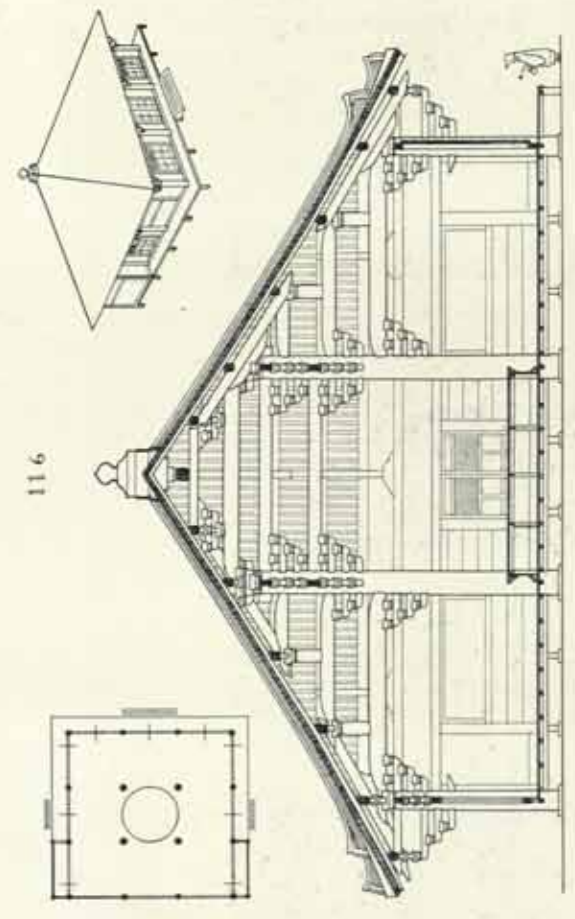
Fig. 113. Tōdaiji great south gate, detail of eaves.



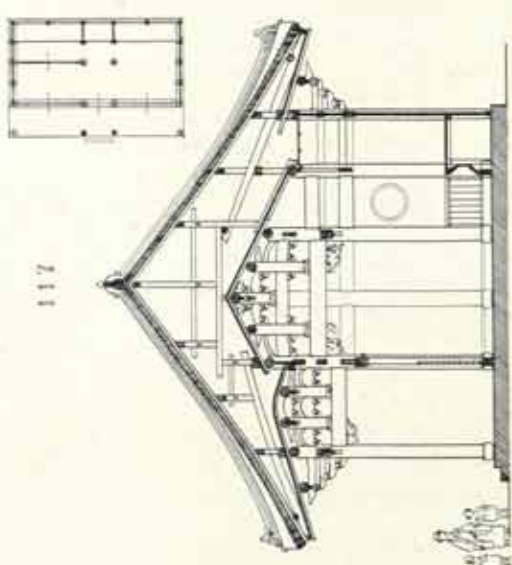
Fig. 114. Jōdōji Jōdōdō, front.



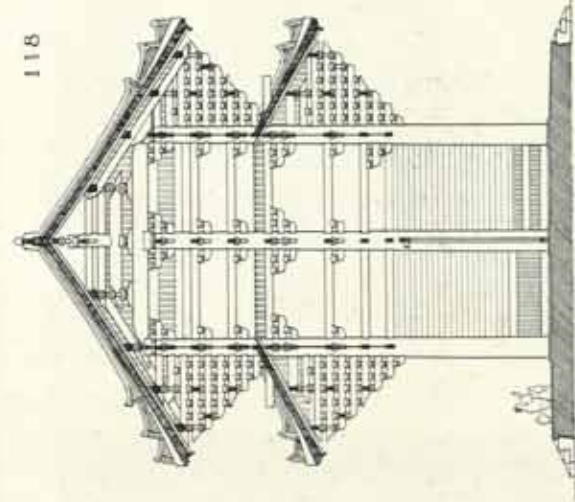
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Fig. 115. Kami-daigo *sutra* repository, cross-section, plan, schematic bird's-eye. Fig. 116. Jōdōji Jūdōdō, cross-section, plan, schematic bird's-eye. Fig. 117. Tōdaiji great south gate, cross-section. Fig. 118. Tōdaiji great south gate, cross-section.



Fig. 119. Kami-daigo *sûtra* repository, eaves detail.



Fig. 120. Jōdōji Jōdōdō, interior.



Fig. 121. Min-hou-hsien, Ch'ung-shêng-ssû Buddha hall, interior.



Fig. 122. Fu-ch'ing-hsien, Wan-fu-ssû Buddha hall, front.

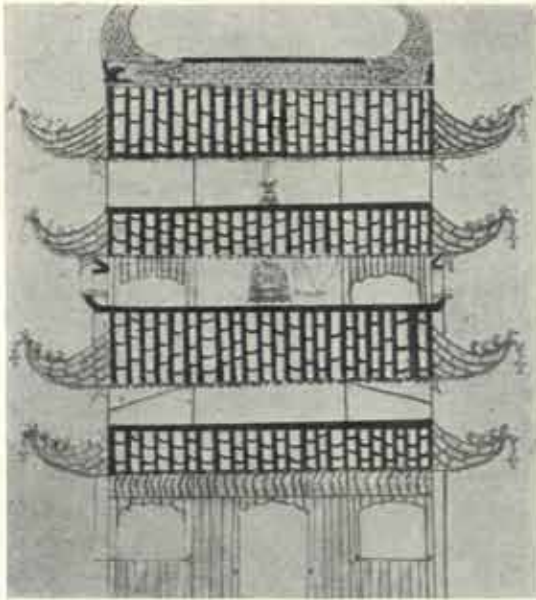


Fig. 123. Ho-shan-ssü bell tower (from a copy of priest Gikai's pictorial notes of Chinese architecture and furnishings).

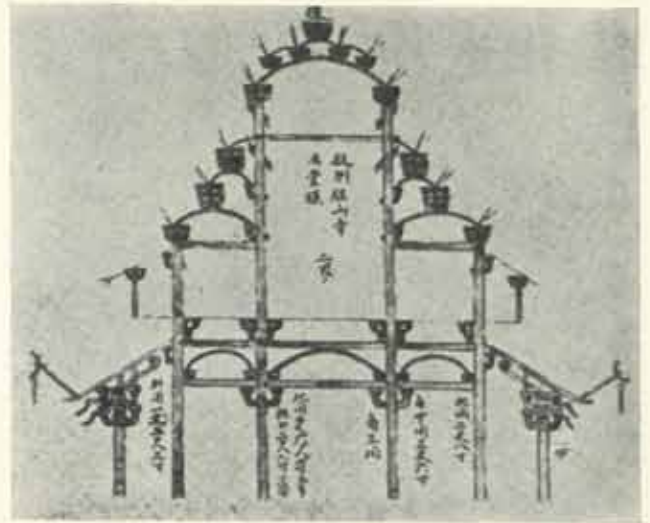


Fig. 124. T'ien-t'ung-ssü Buddha hall, schematic cross-section (from a copy of Gikai's scrolls).



Fig. 125. Nanzenji "triple" gate, Sammon, front (Edo period).



Fig. 126. Eihōji Kaisandō, front.



Fig. 127. Daitokuji Dharma hall, Hattō, interior (Edo period).



Fig. 128. Takaoka, Zuiryūji Buddha hall, front (Edo period).

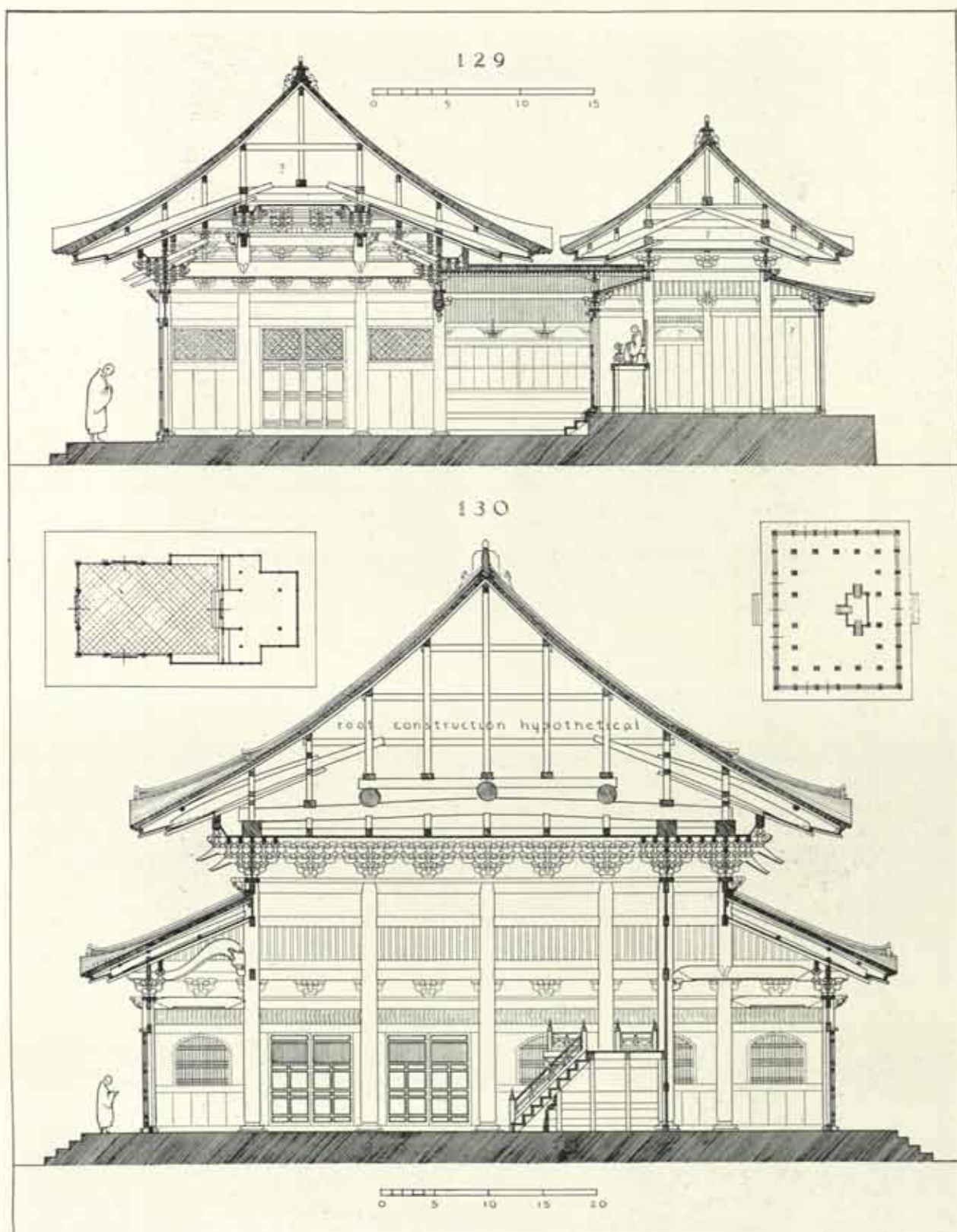


Fig. 129. Eihōji Kaisandō, cross-section, plan.

Fig. 130. Typical large Zen hall, cross-section, plan, schematic bird's-eye (based on the Daitokuji Dharma hall; Edo period).

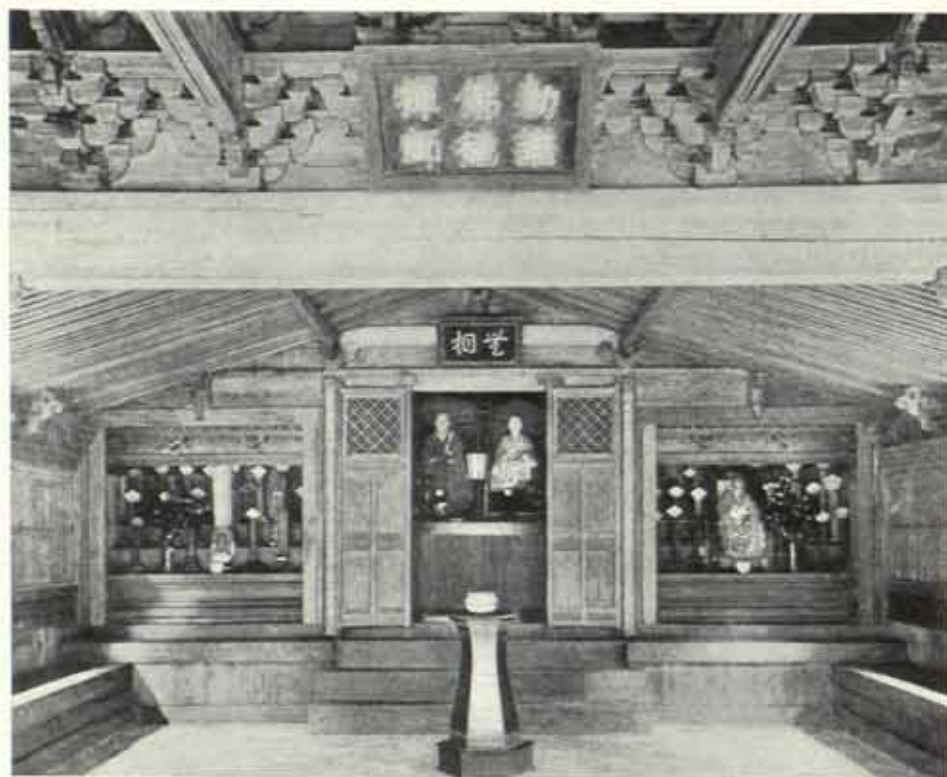


Fig. 132. Eihōji Kaisandō, interior looking toward sanctuary.



Fig. 131. Eihōji Kaisandō, side.

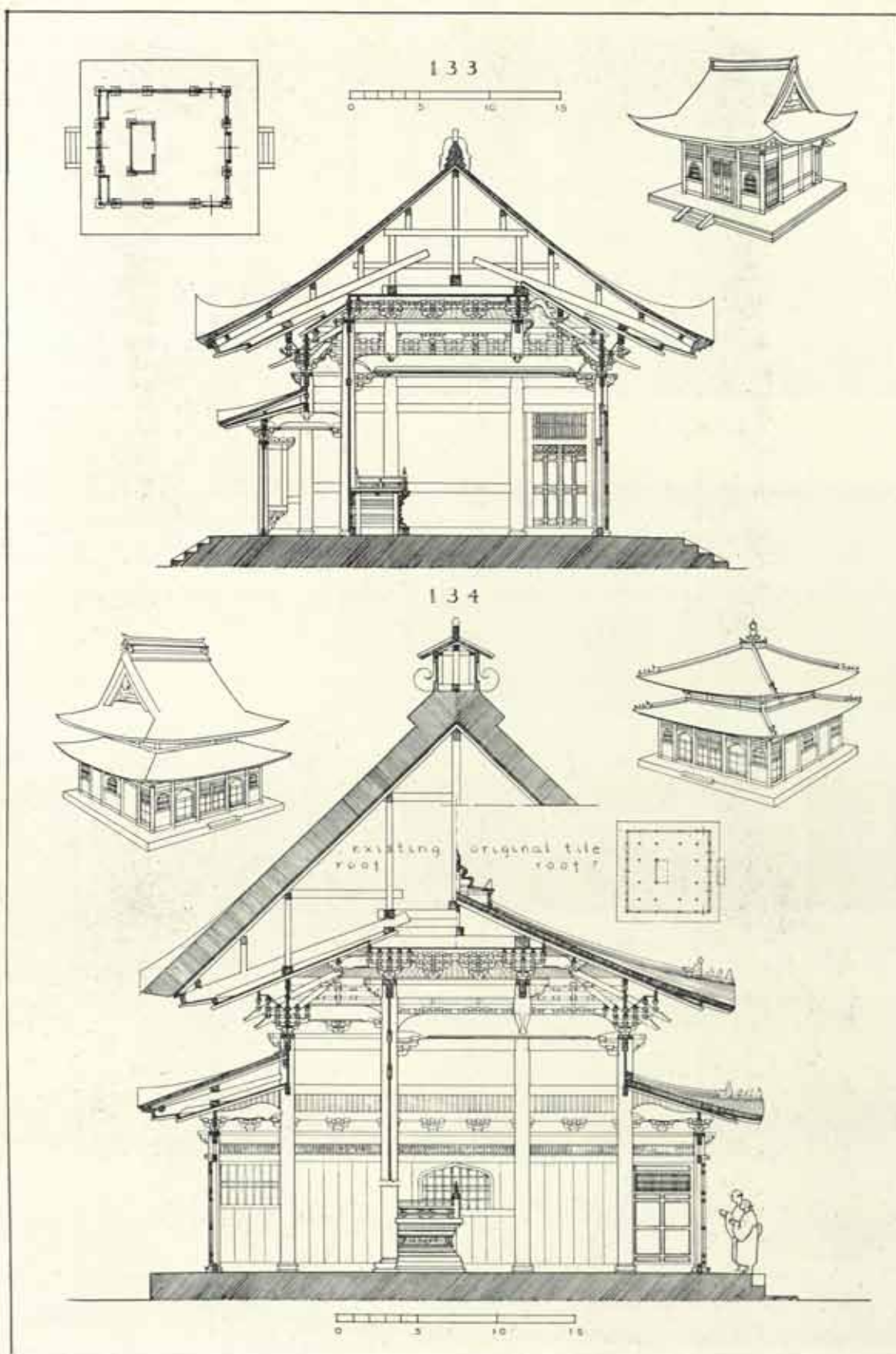


Fig. 133. Shuonan Buddha hall, cross-section, plan (Muromachi period).

Fig. 134. Engakuji relic hall, cross-section, plan.



Fig. 135a. Eihōji Kaisandō bracketing detail.



Fig. 135b. Eihōji Kaisandō bracketing detail.



Fig. 136. Eihōji Kaisandō, interior, *raidō* ceiling "entablature."



Fig. 137. Seihakuji Buddha hall, interior.



Fig. 138. Umeda Shakadō, interior detail, framing at corner.

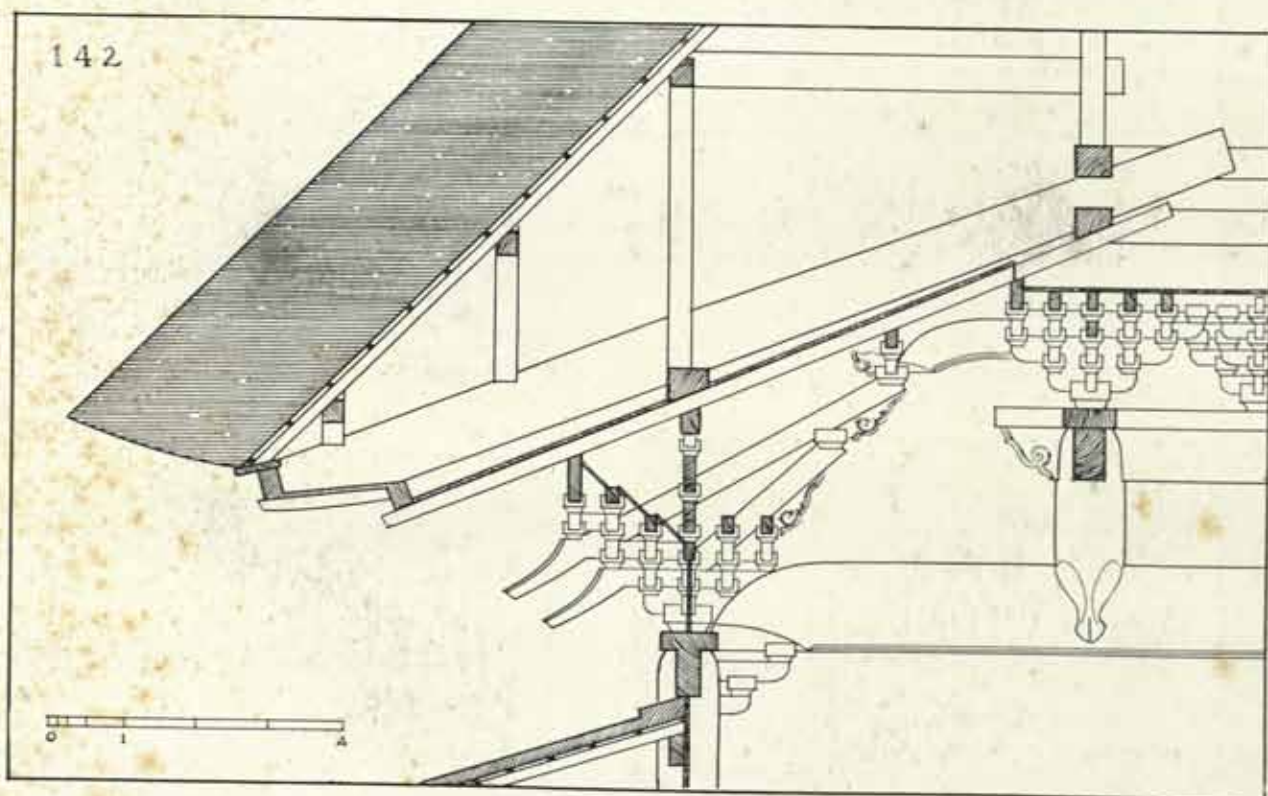
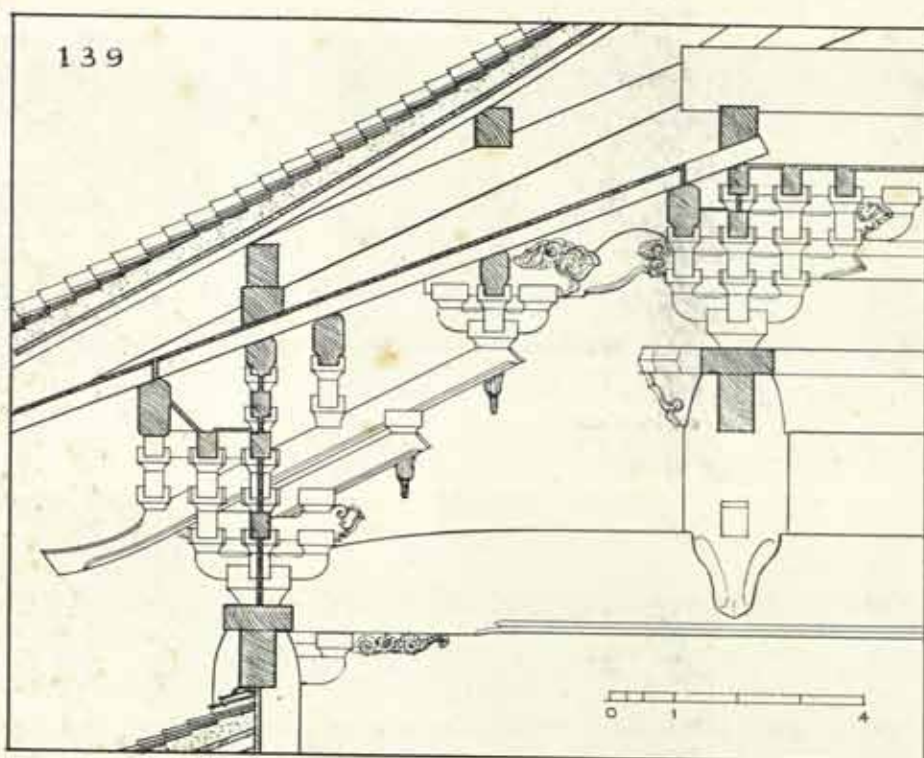
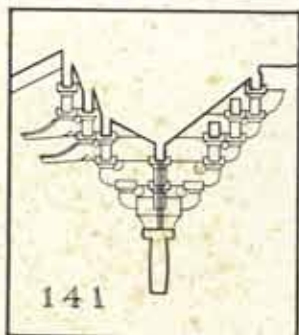
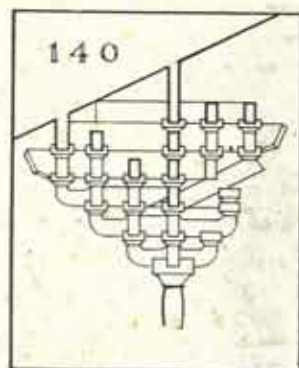


Fig. 139. Umeda Shakadō, bracketing. Fig. 140. Ying Tsao Fa Shih bracketing form; the hidden lever arm. Fig. 141. Su-chou, Yüan-miao-kuan, San-ch'ing-tien, bracketing; the false lever arm. Fig. 142. Engakuji Shariden, bracketing.



Fig. 143. Tenonji Buddha hall, bracketing detail on interior.



Fig. 144. Umeda Shakadō, corbel under main girder.



Fig. 145. Eihōji Kannondō, ornamental corbel under porch roof.



Fig. 146. Pao-shêng-ssū main hall, bracketing.



Fig. 147. Seihakuji Buddha hall, aisle beam in *ebi-kōryō* form.



Fig. 148. Chêng-ting-hsien, Lung-hsing-ssū *sūtra* repository, detail of roof framing.



Fig. 149. Engakuji Shariden, front.

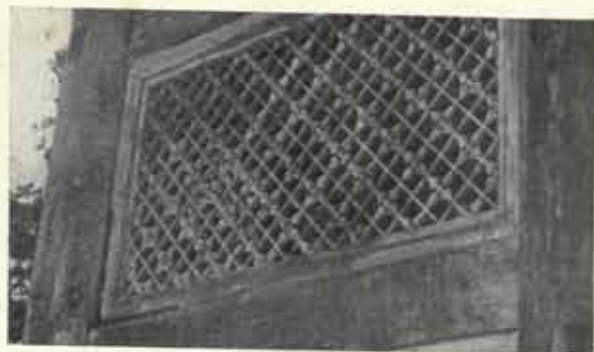


Fig. 151. Eihōji Kaisandō, window grille.



Fig. 150. Ta-t'ung, Hua-yen-ssū, Pao-chia-chiao-tsang-tien, detail of *sūtra* cupboards.



Fig. 152. Tenonji Buddha hall, rear alcove for spirit tablets.



Fig. 153. Seihakuji Buddha hall, detail of altar.



Fig. 154. Engakuji Shariden, detail of altar.



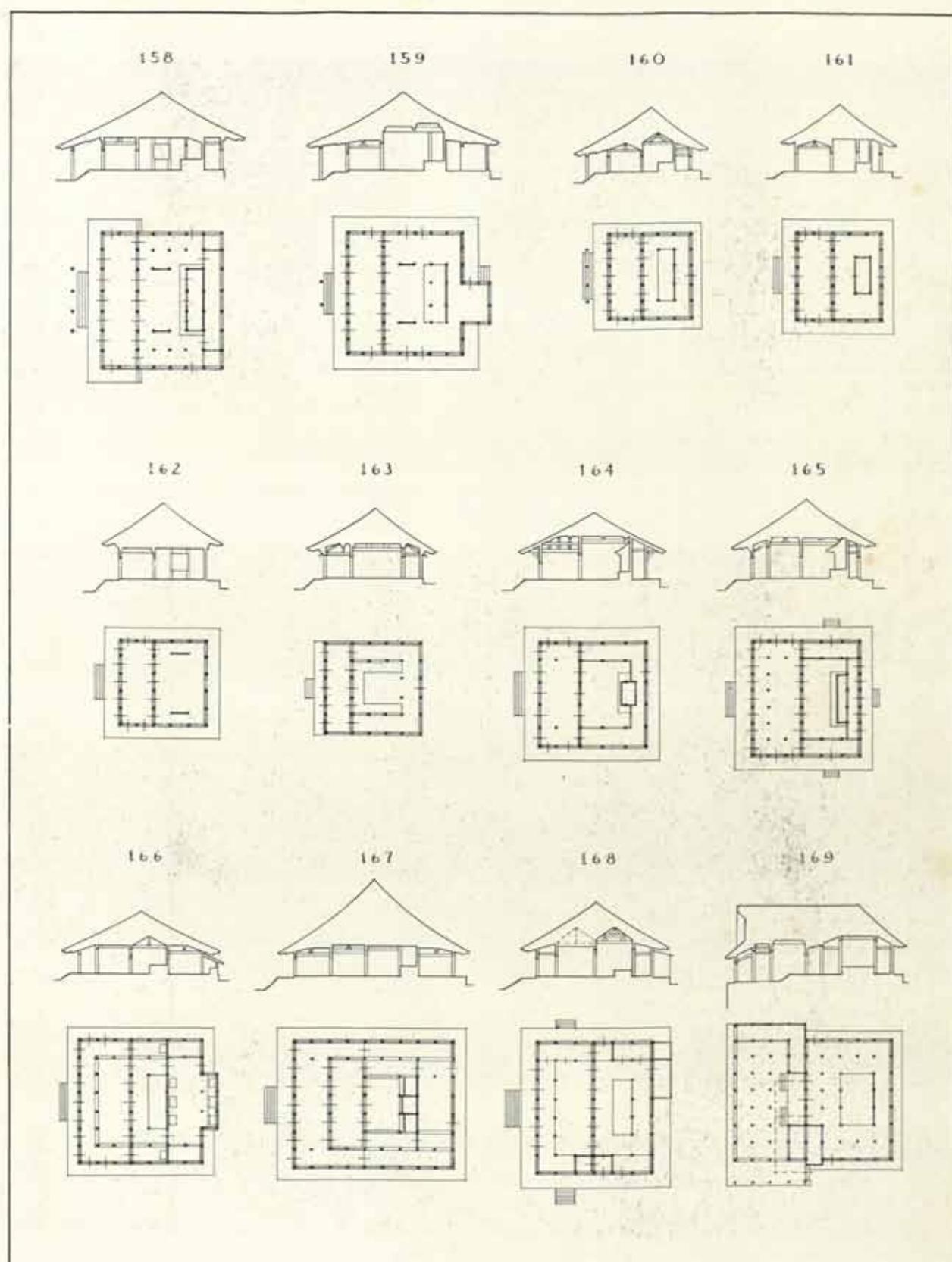
Fig. 155. Kanshinji main hall, front.



Fig. 156. Kanshinji main hall, *raidō* interior.



Fig. 157. Kanshinji main hall, chancel interior.



Figs. 158-169. Schematic cross-sections and plans of (158) Kanshinji; (159) Kongōji; (160) Chōjūji; (161) Ishideji; (162) Murōji; (163) Shōshōin; (164) Jōdōji main hall, Yakushido; (165) Kakurinji; (166) Kongōrinji; (167) Taizanji; (168) Taimadera Mandaradō; (169) Ishiyamadera.

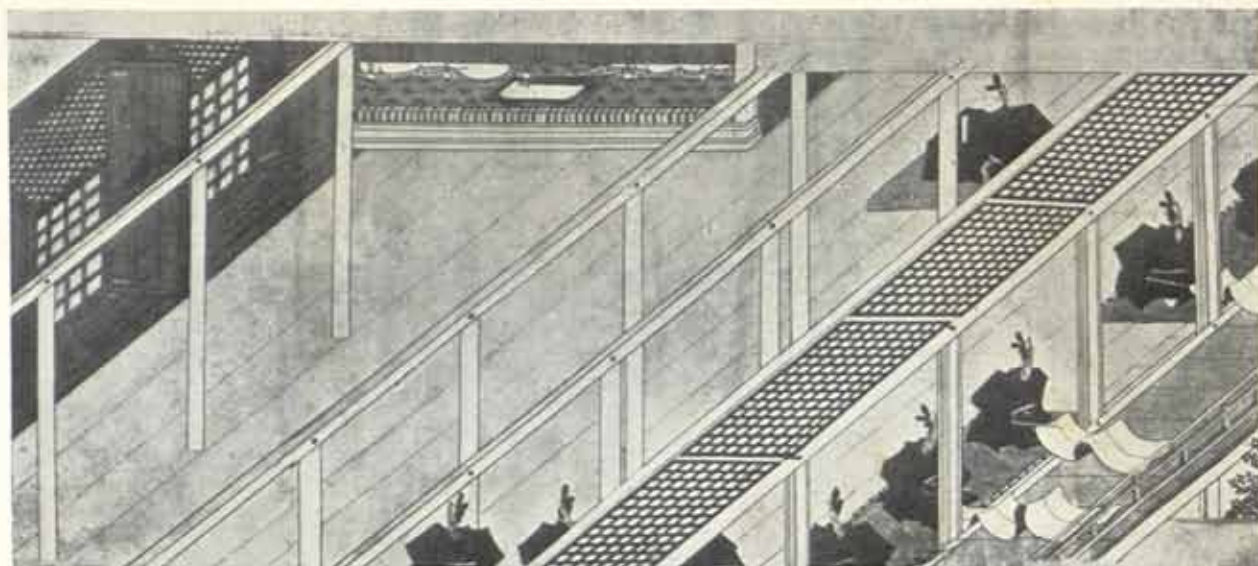


Fig. 170. Ishiyamadera main hall, *raidō* interior, looking toward alcove occupied by the retired Emperor Go-uda (from the *Ishiyamadera-engi*).

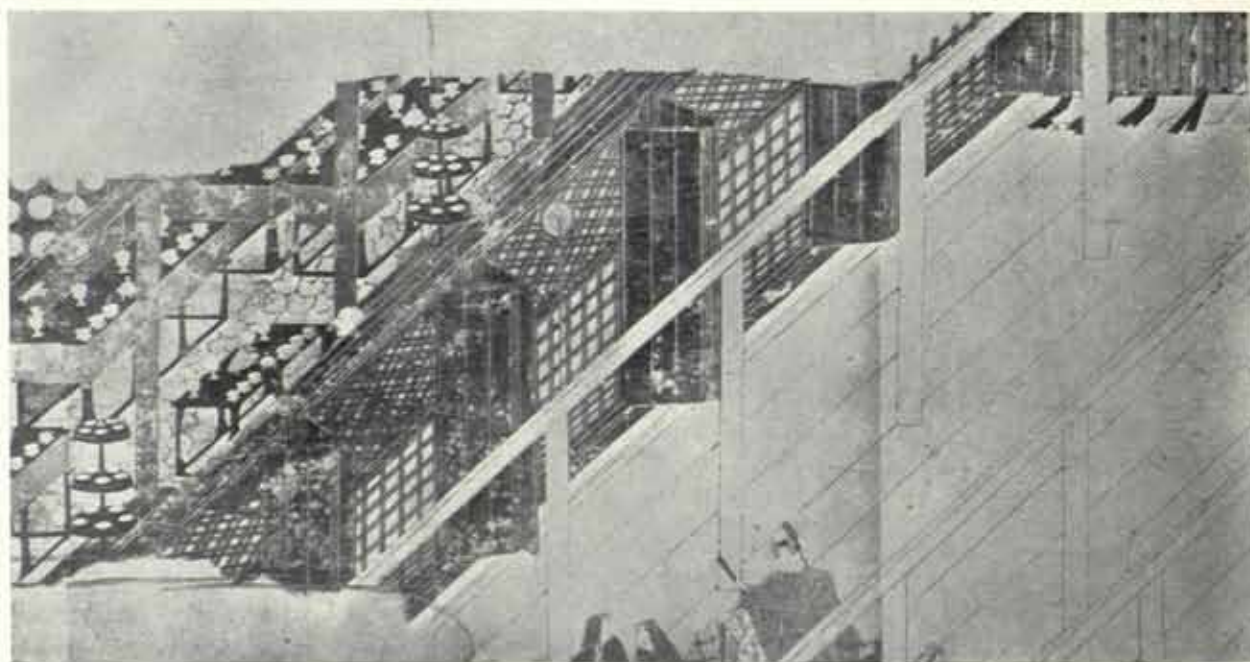


Fig. 171. Ishiyamadera main hall, *raidō* and chancel interior (from the *Ishiyamadera-engi*)



Fig. 172. Tōdaiji Hokkedō, exterior from southwest.



Fig. 173. Tōdaiji Hokkedō, eaves at junction of hall and *raidō*.



Fig. 174. Kōfukuji Hokuendō, eaves.

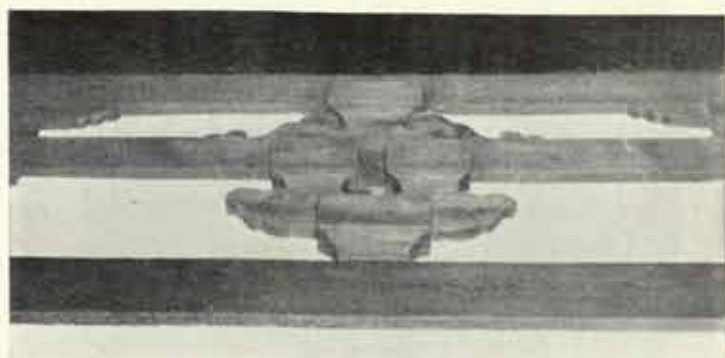


Fig. 175. Ōnomichi, Jōdōji main hall, two-headed bracket.

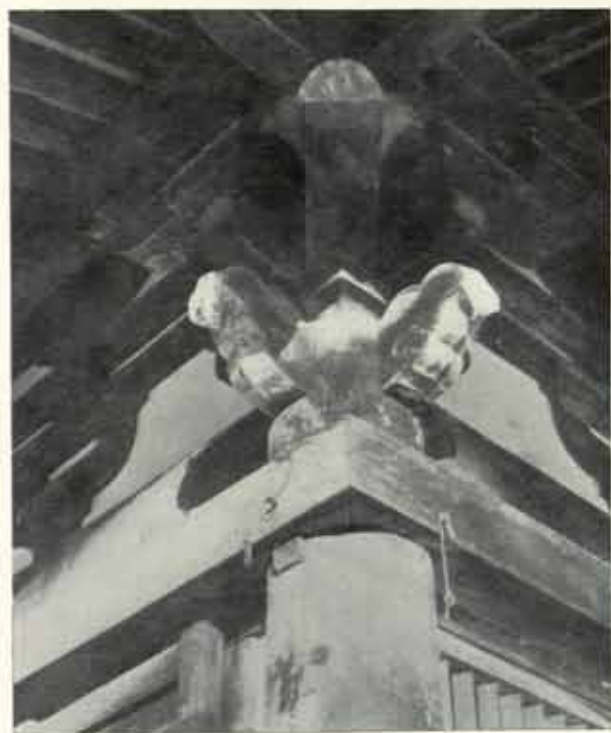


Fig. 177. Kanshinji main hall, corner detail.



Fig. 176. Hyōgo, Jōdōji precincts, Hachiman shrine, bracketing.

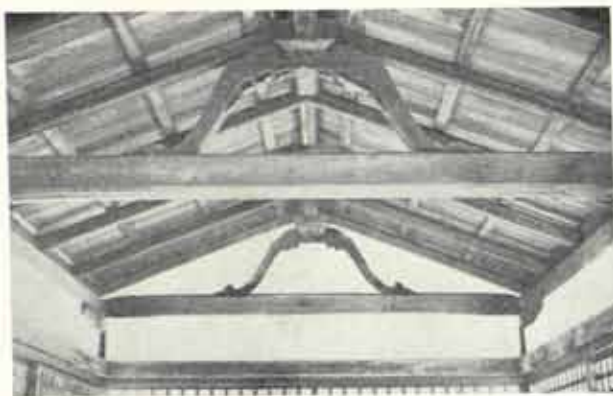


Fig. 178. Isonokami shrine, *kaerumata*.



Fig. 179. Saimyōji main hall, *kaerumata* in porch.



Fig. 180. Gōryō shrine, *kaerumata* in porch.



Fig. 181. Ōnomichi, Jōdōji main hall, porch bracketing detail.



Fig. 182. Futaiji south gate, bracketing detail.



Fig. 183. Futaiji main hall, chancel interior.

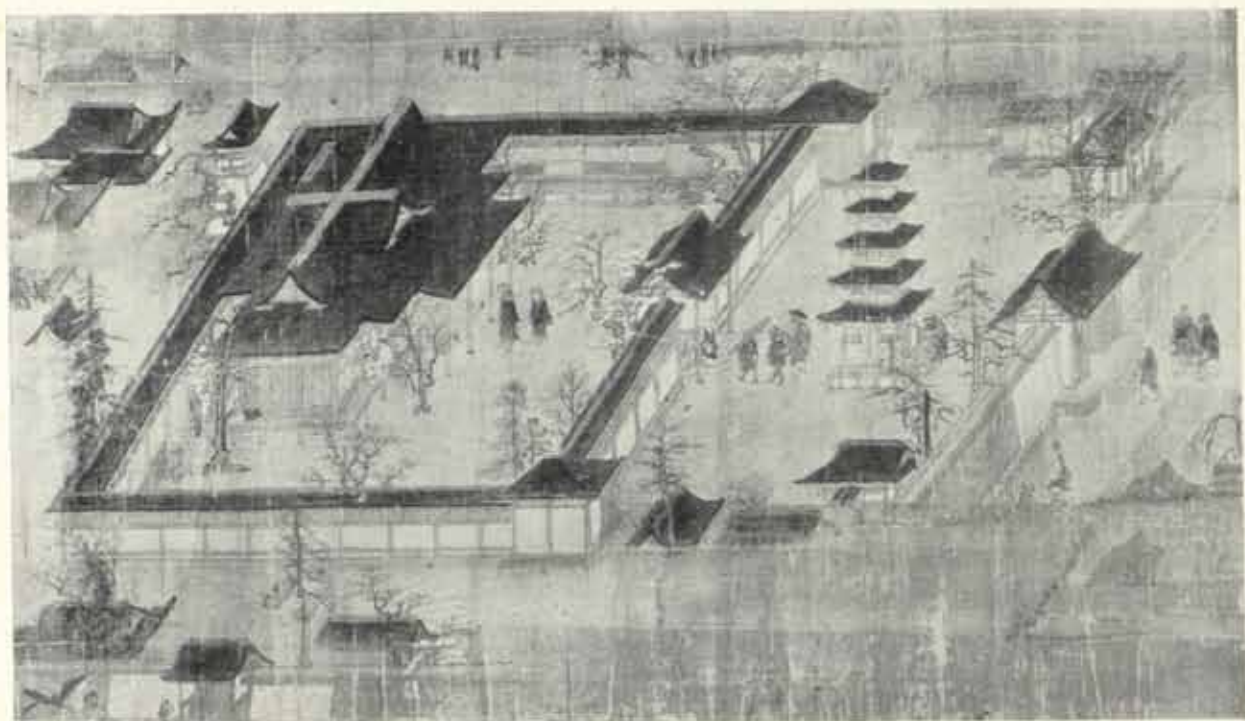


Fig. 184. Rengeōin, Sanjusangendō, end.



Fig. 185. Zenkōji precincts (from the *Ippen-shōnin-edon*).



Fig. 186. Hōryūji Shōryōin, interior lattice and ceiling.

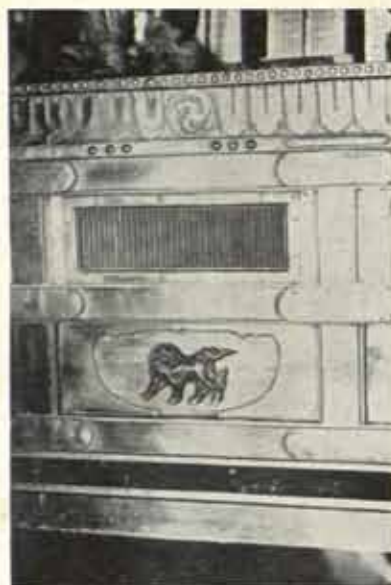


Fig. 188. Kongōrinji main hall, altar detail.



Fig. 187. Hōryūji Shōryōin, chancel interior facing altar shrine.

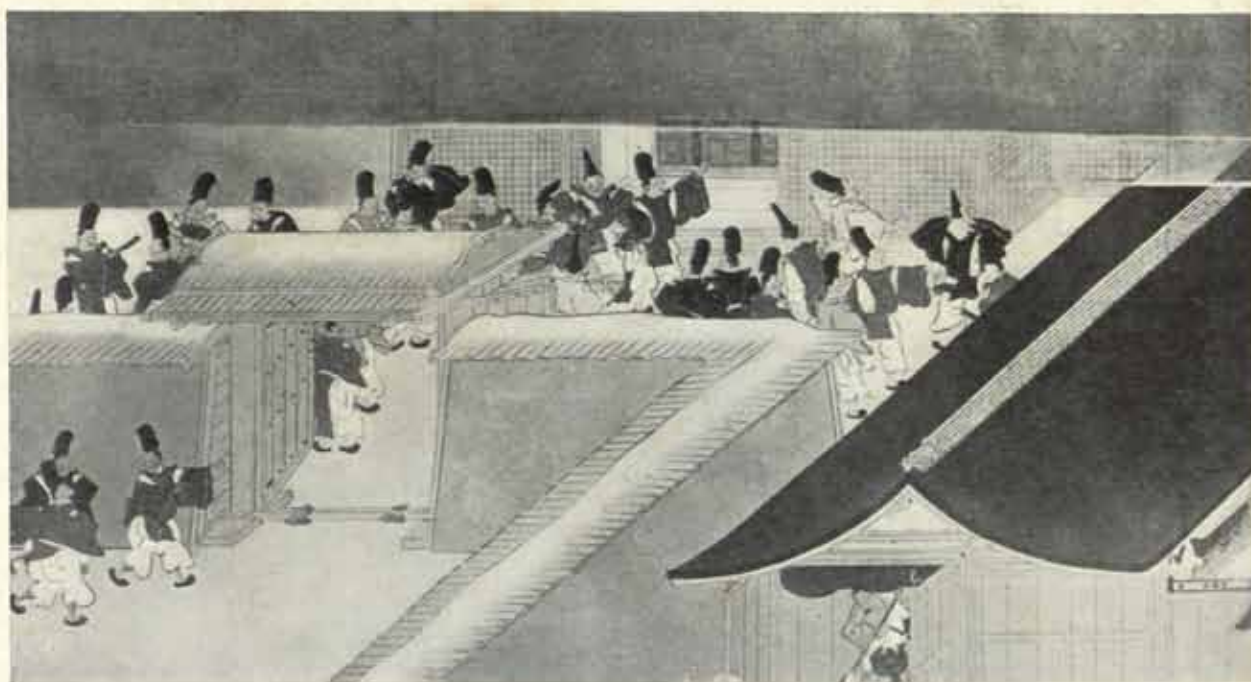


Fig. 189. Kamakura period roofs (from the *Kasuga-gongen-reikenki*)

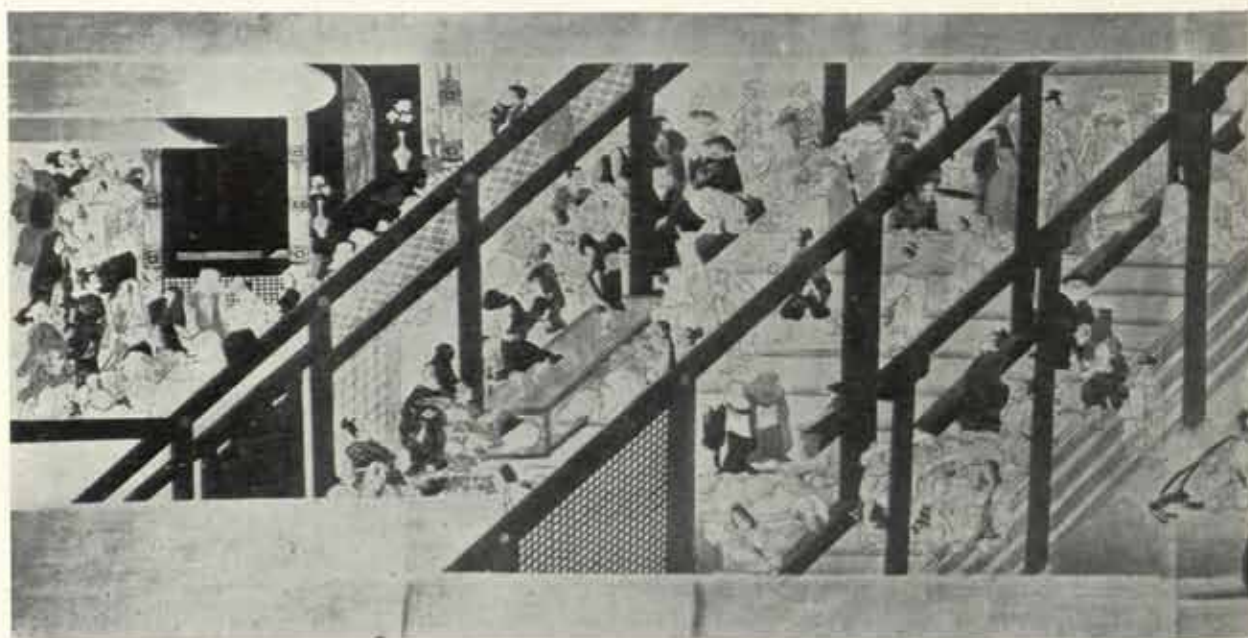


Fig. 190. Shōryōji Shakadō, festival (from the *Yuzu-nembutsu-engi*).

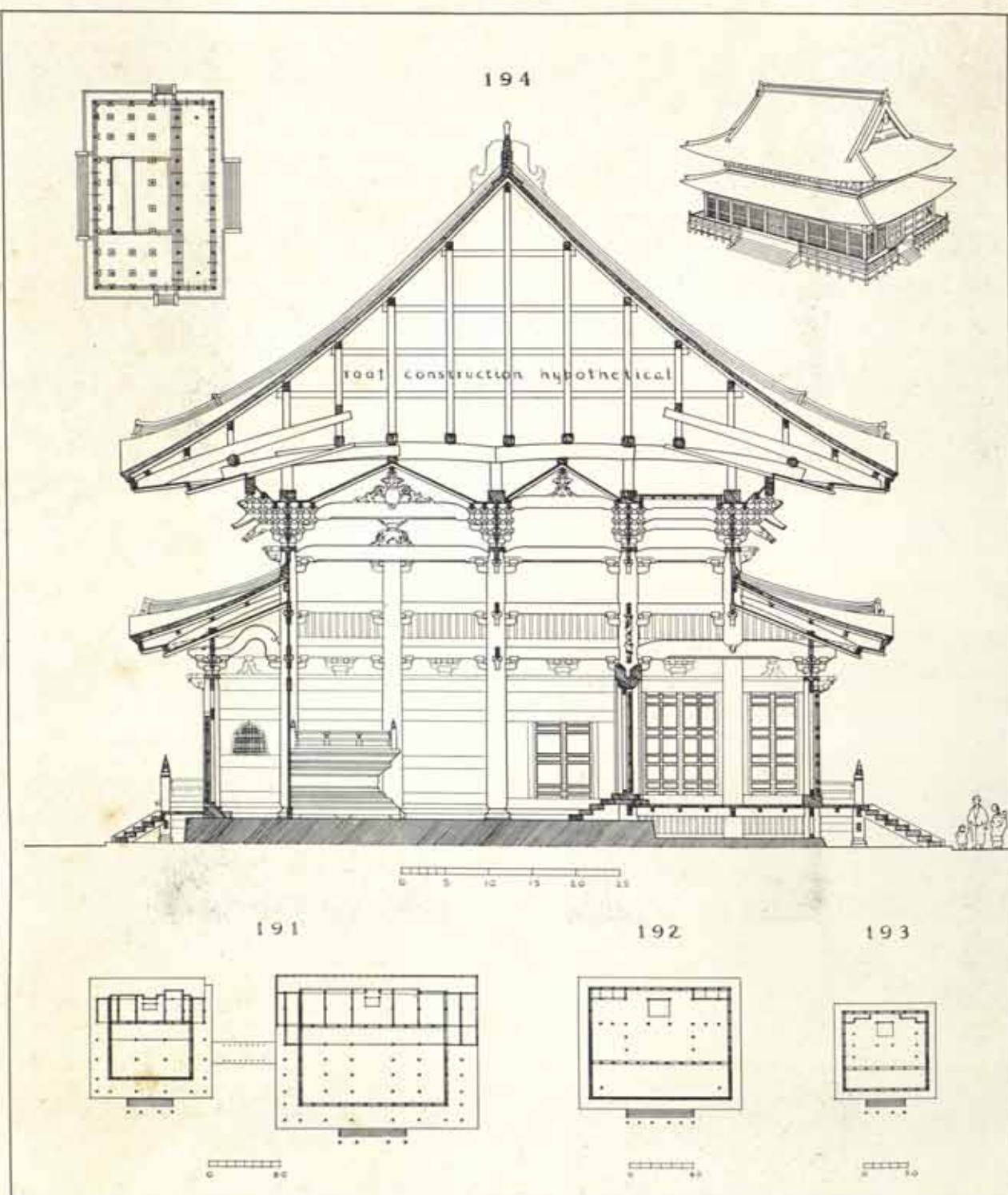


Fig. 191. Western, Hampa-honganji, plan of main halls. Fig. 192. Chionin Founder's hall, plan. Fig. 193. Chionji (Hyakumanben) Founder's hall, plan. Fig. 194. Enryakuji lecture hall, cross-section, plan, schematic bird's-eye.



Fig. 195. Western, Hompa-honganji, view from south.

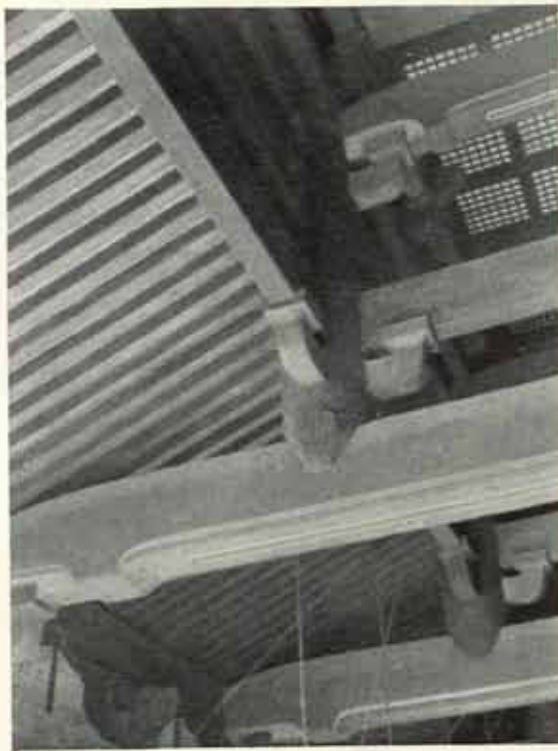


Fig. 196. Enryakuji lecture hall, *raidō* ceiling design.



Fig. 197. Kami-daigo Taishidō, front.

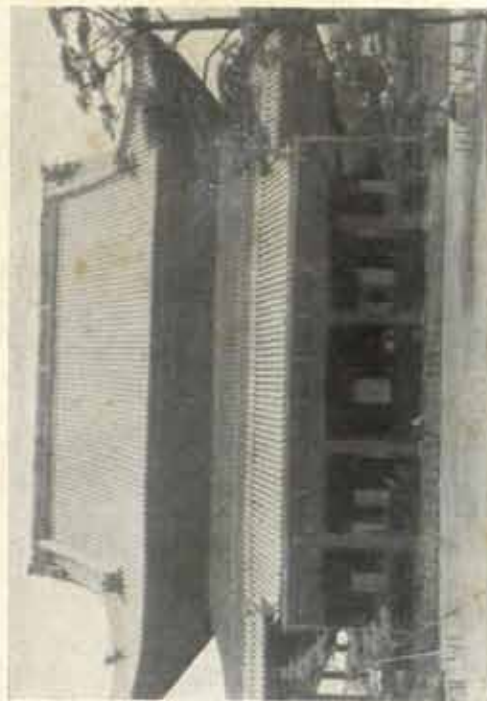


Fig. 198. Nagoya, Honganji Founder's hall, front.



Fig. 199. Eikandō, chancel interior.



Fig. 200. Eikandō monk's quarters, roof framing.



Fig. 201. Ninnaji south gate, roof framing detail.



Fig. 202. Shinnyōdō facade detail.

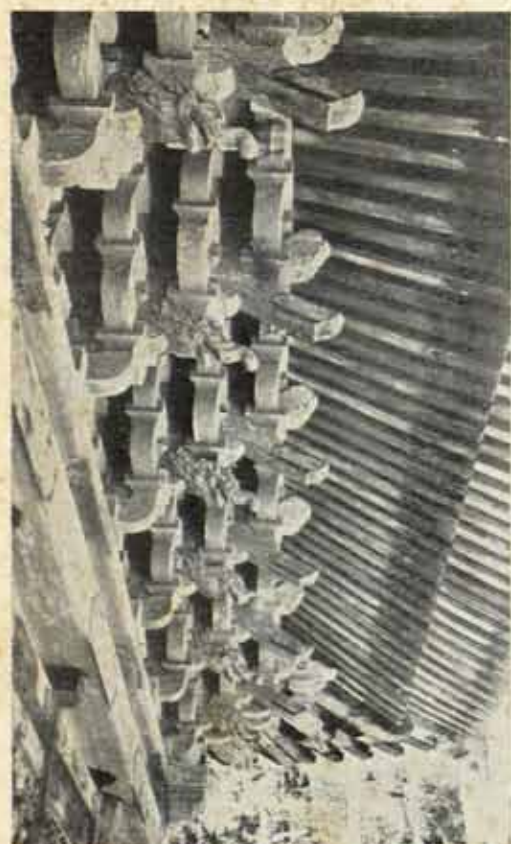


Fig. 203. Kōyasan, Yakushidō, eaves detail.

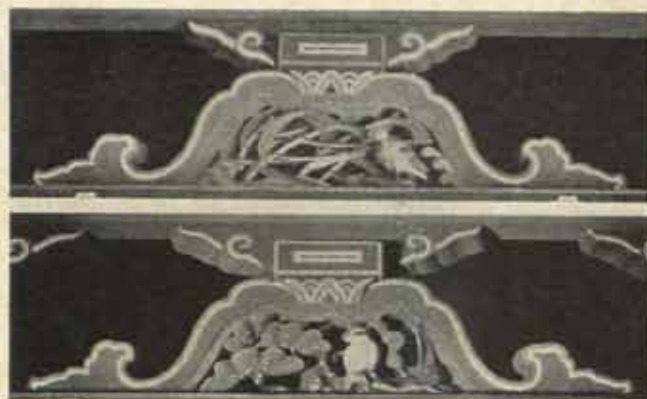


Fig. 204. Nikkō, mausoleum of Tokugawa Ieyasu, corridor *kaerumata*.



Fig. 205. Saidaiji main hall, facade detail.



Fig. 206. Kurodani south gate, Sammon, lower bracketing detail.



Fig. 207. Ōhara, Jōdōin porch.



Fig. 208. Ōhara, Jōdōin, detail of porch wood-carving.



Fig. 209. Saidaiji main hall, bracketing under porch.

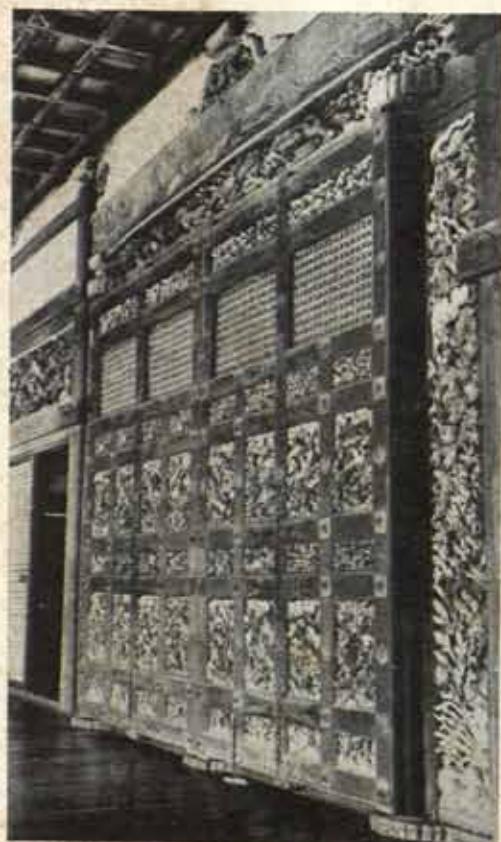


Fig. 210. Zuiganji main hall, central doors.



Fig. 211. Shinnyōdō, gable.

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